



Umm Al-Qura University
College of Engineering & Islamic Architecture
Department of Islamic Architecture



جامعة أم القرى
كلية الهندسة والعمارة الإسلامية
قسم العمارة الإسلامية



Module descriptions (Module Handbook)

(DIA -03)



توصيف المقررات

Main Campus at Al-Abdiyah Makkah, KSA
P.O. 5555
Tel . 00966 5270000 Ext. 1221
www.uqu.edu.sa



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Building Construction 1		
Code	801128-2		
Prerequisite Course(s)	Architectural Design 1	Code	801171-5
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input checked="" type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy Prof. Ehab Rached		
Lecturer(s)	Prof. Khaled Barashed		
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Define the requirements and needs of the building, factors influencing building environment, the analysis of the architectural and structural components of the building systems, building forms (skeletal, tensile and surface structure), site investigations and soil mechanics, types of foundations, load bearing walls and its building materials including construction methods, skeleton buildings of reinforced concrete and their different types, skeleton buildings of steel structures and their types, types of reinforced concrete slabs including normal, flat, hollow, precast and prestressed slabs and finally types of reinforced retaining walls.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Illustrate building components and systems.
- (a 2) - Classify types of building forms.
- (a 3) - Define types of building foundations.
- (a 4) - Describe types of bearing walls.

Through intellectual skills, students will be able to:

- (b 1) - Analyze types of structural skeletal systems and slabs.
- (b 2) - Analyze services integrated in buildings.
- (b 3) - Compare relationships between soil, foundations and buildings.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Prepare and present reports.
- (c 4) - Carry out specialized designs.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Lead and motivate individuals.
- (d 6) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Introduction to building construction, and building requirements
- Week No. 2** Building sytemes and materials (concrete)
- Week No. 3** Introduction to site investigation and soil Mechanics
- Week No. 4** Introduction to Foundations
- Week No. 5** Types of Foundations (Shallow Foundation: strip, pad and raft);
- Week No. 6** Types of Foundations (Shallow Foundation: strip, pad and raft);
- Week No. 7** Deep Foundation (Types of Piles Fundation)
- Week No. 8** Visit the showroom
- Week No. 9** Load bearing walls
- Week No.10** Load bearing walls construction & visit the showroom & visit the showroom
- Week No.11** Types of skeletal structure (concrete)
- Week No.12** Types of skeletal structure (steel) & visit the showroom
- Week No.13** Types of concrete slabs including normal, flat and hollow
- Week No.14** Types of concrete slabs including precast and pre stressed slabs & visit the showroom
- Week No.15** Retaing walls and their types & visit the showroom

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input checked="" type="checkbox"/> Other (to be mentioned): Visit the showroom
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1) Barry	R.	1999	<i>The Construction of Buildings, Vol. 1</i>	7	London Blackwell Sience
(2) Barry	R.	1999	<i>The Construction of Buildings, Vol. 2</i>	5	London Blackwell Sience
(3) Barry	R.	1999	<i>The Construction of Buildings, Vol. 3 & 4</i>	4	London Blackwell Sience
(4) Chudley, Greeno	R.	2006	<i>Building Construction Handbook</i>	6	London Blackwell Sience
(5) Ching	F.	1993	<i>Building Construction Illustrated</i>	2	New York V. N. Reinhold
b- References					
(1)					
(2)					
(3)					
(4)					
(5)					
c- Others					
(1)					
(2)					
(3)					



Umm Al-Qura University
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Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Building Construction 2		
Code	801222-2		
Prerequisite Course(s)	Building Construction 1	Code	801128-2
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input checked="" type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy	Prof. Ehab Rached	
Lecturer(s)	Dr. Farag Abd Elnaby		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Studying and analyzing of the vertical movement elements in buildings such as stairs, elevators and slopes of different types, methods of design, construction types, architectural details and finishing materials. Furthermore, It comprises: studying of non-load bearing walls and its multiple styles for internal and external constructions including methods of construction and materials. Thermal insulation, water insulation, sound insulation in all building components are also considered. Settlement and expansion joints in buildings are fully explained. Roofing types and building forms including: shells, frames, tensile, surface, folded and pneumatic structures are illustrated.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define the connections between floors.
- (a 2) - Explain the new technologies to protect building from effects of weathering.
- (a 3) - Interpret settlement and expansion joints in buildings.
- (a 4) - Describe roof and floor types in buildings.

Through intellectual skills, students will be able to:

- (b 1) - Analyze the vertical movement elements in buildings such as stairs, elevators, and slopes.
- (b 2) - Apply architectural details and its finishing materials for internal or external construction.
- (b 3) - Analyze methods of thermal, water and sound insulations in buildings.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Prepare and present reports.
- (c 4) - Prepare and interpret projects using traditional drawing and/or CAD techniques.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Define out the latest methods of implementation and materials.
- (d 3) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Introduction
- Week No. 2** Types of Stairs
- Week No. 3** Stairs Details
- Week No. 4** Ramps
- Week No. 5** Elevators & Elevators Details
- Week No. 6** Escalators and Travellators
- Week No. 7** Non load bearing walls construction
- Week No. 8** Non load bearing walls construction finishes
- Week No. 9** Insulations in buildings ; water insulation,thermal insulation and sound insulation
- Week No.10** Details of Insulations & visit the showroom
- Week No.11** Details of Insulations & visit the showroom
- Week No.12** Settlement and expansion joints
- Week No.13** Details of Joints & visit the showroom
- Week No.14** Roofing Types and building forms ; shells, frames and tensile Structure
- Week No.15** Roofing Types and building forms ; surface structure, folded Structure, Pneumatic structure, etc..)

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input checked="" type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned): visit the showroom
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1) D.K.Ching	F.	2013	<i>Building Construction Illustrated</i>	4th	USA Matias Inostroza
(2) Barry	R.	1999	<i>The Construction of Buildings, Vol. 1</i>	7	London Blackwell Sience
(3) Barry	R.	1999	<i>The Construction of Buildings, Vol. 2,3,4,5</i>	5	London Blackwell Sience
(4) Haider	F.	1993	<i>The Construction of Buildings, Vol. 1,2,3 & 4</i>	4	London Blackwell Sience
(5)					
b- References					
(1)					
(2)					
(3)					
(4)					
(5)					
c- Others					
(1)					
(2)					
(3)					



Umm Al-Qura University
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Handbook of Module Specifications

1- General Information

Module Designation	Building Construcion 3		
Code	801224-2		
Prerequisite Course(s)	Building Construcion 2	Code	801222-2
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input checked="" type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy	Prof. Ehab Rached	
Lecturer(s)	Dr. Farag Abd Elnaby		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Studying the various types and sections of doors, different models, architectural details, methods of design and construction, manufacturing and assembling, specifications and used materials. Furthermore, it comprises: Studying windows, methods of manufacture, implementation and assembling, materials used architectural details and construction, various models. Moreover, it comprises: studying the thermal insulation and moisture protection from the ceiling of the building, floors of the ground floor, ways of flooring and finishing, internally and externally, and suspended ceilings.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Illustrate building components and building Details.
- (a 2) - Classify types of Doors and Windows.
- (a 3) - Define types of Floors, Floor finishing, In- and Outdoor.
- (a 4) - Classify various types of suspended ceilings.
- (a 5) - Select thermal insulation and moisture protection in building.

Through intellectual skills, students will be able to:

- (b 1) - Differentiate materials used in manufacturing doors and windows.
- (b 2) - Differentiate between various types of doors and windows
- (b 3) - Analyze floors in general.
- (b 4) - Suggest outdoor and Indoor finishings.
- (b 5) - Suggest thermal insulation and moisture protection.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Prepare and present reports
- (c 4) - Carry out specialized designs.
- (c 5) - Prepare and interpret projects using traditional drawing and/or CAD techniques.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Introduction
- Week No. 2** Doors and Windows , used materials and manufacturing
- Week No. 3** Types of doors and windows
- Week No. 4** Doors and widows details
- Week No. 5** Visit the shoroom & Exercise
- Week No. 6** Partition walls
- Week No. 7** Internal Finishing Materials & visit the showroom
- Week No. 8** External Finishing Materials
- Week No. 9** External Finishing Materials & visit the showroom
- Week No.10** Suspended ceiling Details
- Week No.11** Suspended ceiling Details
- Week No.12** Visit the shoroom & Exercise
- Week No.13** Floor Finishing
- Week No.14** Floors Details
- Week No.15** Floors Details & visit the showroom

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input checked="" type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned): Visit the shoroom
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input checked="" type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1) Barry	R.	1999	<i>The Construction of Buildings, Vol. 1</i>	7	London Blackwell Sience
(2) Barry	R.	1999	<i>The Construction of Buildings, Vol. 2</i>	5	London Blackwell Sience
(3) Barry	R.	1999	<i>The Construction of Buildings, Vol. 3 & 4 & 5</i>	4	London Blackwell Sience
(4) Chudley, Greeno	R.	2006	<i>Building Construction Handbook</i>	6	Cornwal ELSEVIER
(5)					
b- References					
(1) Barashed	K.	20015	<i>Handout Lectures</i>	non	Um Alqura
(2)					
(3)					
(4)					
(5)					
c- Others					
(1) Lecture Handouts					
(2)					
(3)					



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Building construction 4		
Code	801327-2		
Prerequisite Course(s)	Building construction 3	Code	801224-2
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input checked="" type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy	Prof. Ehab Rached	
Lecturer(s)	Prof. Ehab Rached		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Identification of temporary works associated with the process of construction such as primary works, site plan, study of scaffolding and wrenches, types and materials used and identifying methods and equipment used in different construction process. Furthermore, it comprises studying ways of production of the building. Trends in the development of the construction industry, automated methods used in building construction, pre-casting method, processing and manufacturing buildings of various types.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Describe the process of building construction and Identification of temporary works associated with the process of construction such as primary works and site plan.
- (a 2) - Explain scaffolding and wrenches, its types and materials used.
- (a 3) - Describe mechanisms and equipment used in the different construction processes.
- (a 4) - Classify ways of production of the building, trends in the development of the construction industry, and automated methods used in building construction.
- (a 5) - Mention pre-casting, processing and manufacturing building of various types.

Through intellectual skills, students will be able to:

- (b 1) - Determine the temporary works associated with the process of construction.
- (b 2) - Select types of scaffolding and wrenches.
- (b 3) - Suggest mechanisms and equipment used in the different construction process.
- (b 4) - Evaluate the development of the construction industry, and automated methods used in building construction .
- (b 5) - Compare various types of pre-casting, processing and manufacturing building .

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Manage tasks and resources efficiently.
- (d 7) - Demonstrate efficient IT capabilities.

5- Contents

- | | |
|-------------------|---|
| Week No. 1 | Temporary and associated works of building construction (Safety and security of the site, site handover and site preparation) |
| Week No. 2 | Temporary and associated works in building construction (Site planning and temporary constructions) |
| Week No. 3 | Machinery and equipments used in different construction processs (Equipments for site works) |
| Week No. 4 | Machinery and equipments used in different construction processs (Transportation equipment) |
| Week No. 5 | Machinery and equipments used in different construction processs (Forms, scaffolds and reinforcement works) |
| Week No. 6 | Machinery and equipments used in different construction processs (shuttering, mixing and casting of concrete) |
| Week No. 7 | Promote field visit to construction site or to show room in the departement |
| Week No. 8 | Machinery and equipments used in different construction processs (concrete compaction) |
| Week No. 9 | Buildings production (construction methods) |
| Week No.10 | Buildings production (construction methods, construction using wall bearing systems and construction using structural concrete systems) |
| Week No.11 | Buildings production (construction methods, mechanized methods and tunneling structure) |
| Week No.12 | Buildings production (construction methods, Mechanized methods and lifted slabs) |
| Week No.13 | Buildings production (construction methods, mechanized methods and vertical sliding wrenches) |
| Week No.14 | Buildings production (construction methods, pre-casting methods, processing and manufacturing building of various types) |
| Week No.15 | Presentation of research |

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Class Activities <input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Seminars & Discussion Sessions <input checked="" type="checkbox"/> Field Visit <input type="checkbox"/> Other (to be mentioned): Promote visit to show room in the departement.
Media Employed	<input type="checkbox"/> Whiteboard <input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Working Documents <input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination <input type="checkbox"/> Assignments <input type="checkbox"/> Oral Examination	<input type="checkbox"/> Drawing Examination <input type="checkbox"/> Research and Discussions <input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room <input type="checkbox"/> Computer Lab. <input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Design Studio <input type="checkbox"/> Laboratory <input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Levy	Sid	2010	<i>Construction Data Book - Construction Materials and Equipment</i>	2nd	USA	Mc Graw Hill
(2) Farnworth	Joh	2001	<i>Aworld-Wide Guide to Massey Ferguson (Industrial and Construction Equipment)</i>	1st	East York shire	Japonica Press
(3) shahid	Reh	2011	<i>Pre-cast concrete for Multi-Storey Structures</i>	1st	USA	Create Space
(4) Elliott	Kim	2002	<i>Precast Concrete Structures : The Design and Construction of Multi-Storey Precast concrete Skeletal Structures</i>	1st	oxford	Butterworth Heinemann
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1) Lecture Handouts						
(2)						
(3)						



Umm Al-Qura University
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Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Building Economy		
Code	801458-2		
Prerequisite Course(s)	Architectural Design (6)	Code	801372-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input checked="" type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Dr. Ibraheem Al-Bukhari		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

This course aims to acquaint the student with the concept of economics and its impact on construction, and to qualify the student to make proper economic decisions concerning architectural projects. The course includes a general explanation of the time value of money and cash flow analysis. The course describes the factors that affect building costs and explains the effect of technical specifications on operation costs. Principles of bill-of-quantity (BOQ), cost estimation, and bidding strategies are illustrated. Concept of value engineering and some advanced building economic concepts are introduced at the end of the course.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Explain the economics of architectural projects
- (a 2) - List the design factors affecting cost of buildings
- (a 3) - Describe the time value of money
- (a 4) - Explain the bill of quantity (BOQ) of projects and the cost estimation process

Through intellectual skills, students will be able to:

- (b 1) - Determine the significance of economics in building design
- (b 2) - Apply the estimation process
- (b 3) - Implement the course knowledge on different types of buildings
- (b 4) - Analyze the best values for the project

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Prepare and present reports.
- (c 4) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Factors affecting Building costs
- Week No. 2** Time value of money: present and future values
- Week No. 3** Cash flow Analysis
- Week No. 4** Energy calculation methods: effect on current and future costs of building
- Week No. 5** Specifications of architectural works
- Week No. 6** Bill-of-Quantity (BOQ) and cost estimation
- Week No. 7** Applications on cost estimation: Conceptual and Detailed Estimating
- Week No. 8** Bidding strategies
- Week No. 9** Strategies and probabilities of bid winning
- Week No.10** Applications and examples on bidding strategies
- Week No.11** Value engineering: concept, principles and standards
- Week No.12** Effects of value engineering on building costs
- Week No.13** Advanced concepts of building economics (sustainability)
- Week No.14** Advanced concepts of building economics (Green Architecture)
- Week No.15** Computer applications in building economics

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials. (pub. year)	Book title.	Edition.	Place of pub:	publisher.	
(1) Fraser	N.M 2008	<i>Global Engineering Economics: Financial Decision Making for Engineers</i>	4th	Canada	Pearson	
(2) Gould	F.E 2010	<i>Managing the Construction Process: Estimating, Scheduling, and Project Control</i>	4th	USA	Prentice Hall	
(3) TheAqua Group	1999	<i>Tenders Contracts for Building</i>	3rd	London	Wiley-Blackwell	
(4) Manser	J.E 2015	<i>Economics: A Foundation Course for the Built Environment</i>	3rd	London	Routledge	
(5)						
b- References						
(1) Halpin	W.P 2011	<i>Construction Management</i>	4th	USA	John Wiley & Sons	
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Building science 1		
Code	801223-2		
Prerequisite Course(s)	Building Construction 1	Code	801128-2
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input checked="" type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy	Prof. Ehab Rached	
Lecturer(s)	Dr. Amr Elzawahry		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

This course aims to study various climate regions of the world and its characteristics. It focuses on environmental factors affecting the design, the sun including factors determine the intensities of sun rays, methods of protection from the sun, temperature and its impact on the building including all influencing factors and heat transfer. The course concerns with ventilation and its impact on the temperature of the internal and external surfaces, building orientation and its impact on the temperature, consideration for orientation process, building orientation in the tropical regions and traditional methods to control building climate in dry, warm, and humid areas. The course also comprises passive and active energy treatments including double walls, double roof, wind catcher, shading devices and buildings under ground level. Students should also learn about natural lighting features including various forms of natural lighting, the distribution of natural lighting within the space, important considerations in the design of natural lighting, factors influencing the amount of natural light in space, the lighting changes during the day, special considerations for the use of natural lighting in warm places, general recommendations for the warm dry places in terms of physical planning, forms of the building and building materials.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Classify various climate regions of the world and its characteristics.
- (a 2) - Explain environmental factors affecting the design.
- (a 3) - Explain impacts of ventilation.
- (a 4) - Illustrate passive and active energy treatments.
- (a 5) - Illustrate natural lighting features including various forms of natural lighting.

Through intellectual skills, students will be able to:

- (b 1) - Analyze environmental factors affecting the design.
- (b 2) - Compare between passive and active energy treatments.
- (b 3) - Analyze natural lighting features including various forms of natural lighting.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Appreciate the neatness and aesthetics in design and approach.
- (c 6) - Work in a multi-professional working environment.
- (c 7) - Display imagination and creativity.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Transfer techniques and solution from one field to another.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Communicate effectively.
- (d 7) - Demonstrate efficient IT capabilities.
- (d 8) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Various climate regions of the world and their characteristics.
- Week No. 2** Continued: Various climate regions of the world and their characteristics.
- Week No. 3** Environmental factors affecting the design.
- Week No. 4** The sun, factors determine the intensities of sun rays and methods of protection from the sun.
- Week No. 5** Temperature and its impact on buildings, the influencing factors and heat transfer concept.
- Week No. 6** Ventilation and its impact on the temperature of the internal and external surfaces.
- Week No. 7** Building orientation, impact on the temperature and the process of redirection.
- Week No. 8** Building orientation in tropical regions and traditional methods to control climate in buildings in dry, warm and humid areas.
- Week No. 9** Continued: building orientation in tropical regions and traditional ways to control climate for buildings in dry, warm and humid areas.
- Week No.10** Passive and Active energy treatment including double walls, double roof, wind catcher, sun breakers, shading devices and buildings under ground level.
- Week No.11** Continued: Passive and Active energy treatment including double walls, double roof, wind catcher, sun breakers and buildings under ground level. .
- Week No.12** Natural lighting features including various forms of natural lighting, the distribution of natural lighting within the space, important considerations in the design of natural lighting, the influencing factors in the amount of natural light in space, lighting changes during the day and considerations for the use of natural lighting in warm places.
- Week No.13** Continued: Natural lighting features including various forms of natural lighting the distribution of natural lighting within the space, important considerations in the design of natural lighting, the influencing factors in the amount of natural light in space, the lighting changes during the day, special considerations for the use of natural lighting in warm places.
- Week No.14** General recommendations for the warm dry places in terms of physical planning, forms of buildings, guidance and building materials.
- Week No.15** Continued: General recommendations for the warm dry places in terms of physical planning, forms of buildings and building materials.

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input checked="" type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1) Evan, M.	1980.	. Housing Climate & Comfort.	London	
(2) Haider, F.A.,	2005	Modern Encyclopedia of Buildings Construction	Alex.Egypt.	Monshaat Almaaref.
(3) Golany, G.	1980	Housing in Arid Lands.	:London	: Architecture Press
(4) Koenigsberger , O. H	1998	Tropical Housing and Building	London	pitman Publishing ,
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1) Lecture Handouts				
(2)				
(3)				



Umm Al-Qura University
 College of Engineering and Islamic Architecture
 Department of Islamic Architecture
 Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Building science 2		
Code	801225-2		
Prerequisite Course(s)	Building science 1	Code	801223-2
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input checked="" type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy Prof. Ehab Rached		
Lecturer(s)	Dr. Said Mansi		
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester
	Self-study	30	Hour(s) /Semester
	Total	60	Hour(s) /Semester
Credit Points according to ECTS	2	point(s)	Credit Hours 2 Hour(s)

3- Module Summary

The course comprises the followings: Studying sanitation equipment, sanitary wares, pipes extensions of water and sanitation, sewerage in multi-story buildings, and drainage systems. It Focuses on air conditioning, reasons for using of air conditioning, air conditioning equipment, air conditioning components of different systems, central air conditioning system maps, different air conditioning systems, principles of air conditioning, properties of mixture of air and water vapour, Secrometry map, boundaries for desirable comfortable environment, air conditioning requirements in buildings design, and factors reducing cooling loads. The course also concerns with sound isolation, distance law for the reduction of sound, reflection and absorption of sound, noise control, sound isolation internally and externally, method of calculating the reduction of noise in walls of mixed construction and techniques of reducing noise in the planning and design of buildings. Furthermore, It comprises acoustic treatment including related factors, frequency, sound absorption and absorbent surfaces, controlling and calculating sound inside spaces, safety procedures and fire-fighting equipments, fire prevention and means of escape.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Sort sanitation equipment, sanitary wares and drainage systems.
- (a 2) - Demonstrate understanding of air conditioning systems.
- (a 3) - Illustrate sound isolation and noise control systems.
- (a 4) - Describe various acoustic treatments.

Through intellectual skills, students will be able to:

- (b 1) - Create and manage tasks and resources efficiently.
- (b 2) - Evaluate solutions for various building problems.
- (b 3) - Construct and transfer techniques and solution from one field to another.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Prepare and present reports.
- (c 4) - Prepare and interpret projects using traditional drawing and/or CAD techniques.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Work in stressful environment and within constraints.
- (d 3) - Manage tasks and resources efficiently.
- (d 4) - Define out the latest methods of implementation and materials

5- Contents

Week No. 1 Introduction

Week No. 2 Sanitary Drainage works in buildings

Week No. 3 Terminology and symbols

Week No. 4 Health devices

Week No. 5 Types of drainage systems

Week No. 6 Water supply in buildings

Week No. 7 Pipe extensions in water

Week No. 8 Types of supply systems

Week No. 9 Visit the showroom & Exercise

Week No.10 Types of lighting

Week No.11 Distribution details & visit the showroom

Week No.12 Types of air conditioning and refrigeration

Week No.13 installation of air conditioning and technical details & visit the showroom

Week No.14 Types of fire fighting systems

Week No.15 safety procedures and means of escape

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input checked="" type="checkbox"/> Laboratory Experiment	<input checked="" type="checkbox"/> Other (to be mentioned): Visit the showroom
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1) Elkhateeb,A.,	2003	<i>Architectural acoustics</i>	Cairo Egypt	Anglo-Egyptian Library
(2) Mckay, J.k.,	1998	<i>Building Construction</i>	V.4 London,	Longman group Ltd.,
(3) Barry, R.,	1996.	<i>The construction of Buildings,</i>	V.5 U.K.	Blackwell Science,
(4) Haider, F.A.,	2005	<i>Modern Encyclopedia of Buildings Construction</i>	V2,3 Alex.Egypt.	Monshaat Almaaref.
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1) Lecture Handouts				
(2)				
(3)				



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Computer Applications 1		
Code	801141-2		
Prerequisite Course(s)	Architectural Design 1	Code	801171-5
Recommended Skills	computer skills		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input checked="" type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	Dr. Mohamed Shawky		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	45	Hour(s) /Semester		
	Self-study	60	Hour(s) /Semester		
	Total	105	Hour(s) /Semester		
Credit Points according to ECTS	4	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Introduction including definition of computer aided drafting software, the required computer needed, learning the skills of drawing, amendment, use of layers, colors, shapes, and drawing dimensions. Furthermore, it comprises the three dimensional drawings, drawing perspectives and shading. At the end of this course, the students are required to present a full project to apply all previous commands.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Demonstrate understanding of the basics of information technology related to architecture appears.
- (a 2) - Demonstrate understanding of related programs majoring in architecture.
- (a 3) - Explain the main principles of digital CAD design systems.

Through intellectual skills, students will be able to:

- (b 1) - Create a full project using AutoCAD.
- (b 2) - Apply CAD digital applications.

Through professional and practical skills, students will be able to:

- (c 1) - Use a wide range of technologies, equipment and software associated with a degree in architecture is used.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Create two-dimensional drawings.
- (c 4) - Display imagination and creativity.
- (c 5) - Employ computer facilities for design and graphics collection and analysis of information and interpretation of graphics.
- (c 6) - produce shop-drawings with the help of the computer.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Use Network information is to get the blocks to be used in the exercises.
- (d 6) - Manage tasks and resources efficiently.
- (d 7) - Demonstrate efficient IT capabilities.

5- Contents

- Week No. 1** General Introduction
- Week No. 2** Introduction to AutoCAD program
- Week No. 3** The use of AutoCAD program to produce a two-dimensional graphics
Drafting setting commands and layers
- Week No. 4** Drawing commands in AutoCAD program
- Week No. 5** Drawing commands in AutoCAD program
- Week No. 6** Modification commands in AutoCAD program
- Week No. 7** Modification commands in AutoCAD program
- Week No. 8** Modification commands in AutoCAD program
- Week No. 9** Block command&Vision commands in AutoCAD program
- Week No.10** Writing commands and dimensions in AutoCAD program
- Week No.11** Writing commands and dimensions in AutoCAD program
- Week No.12** Finishing the Drawing and import and exporting command
- Week No.13** Print commands in AutoCAD program
- Week No.14** Exercise for a small project
- Week No.15** General Revision

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination	<input type="checkbox"/> Research and Discussions	
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Other (to be mentioned):		
	<input type="checkbox"/> Oral Examination			
Examination Requirements	<input type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio	<input type="checkbox"/> Laboratory	
	<input checked="" type="checkbox"/> Computer Lab.	<input type="checkbox"/> Other (to be mentioned):		
	<input type="checkbox"/> Specific Equipment			

8- Reading List

a- Text Books			
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub: publisher.
(1)			
(2)			
(3)			
(4)			
(5)			
b- References			
(1)			
(2)			
(3)			
(4)			
(5)			
c- Others			
(1)	AutoCAD Tutorials		
(2)	AutoCAD20142DTutorial		
(3)	Notes are handed out to the students throughout the semester.		



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Computer Applications 2		
Code	801244-2		
Prerequisite Course(s)	Computer Applications 1	Code	801141-2
Recommended Skills	Windows and Autocad 2D		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input checked="" type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	Dr. Mohamed Shawky		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	45	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

This course develops the students' capacity to handle some tools, techniques, softare and media that are available in the vast world of graphics. The course focuses on developing critical and creative thinking processes to prepare the students for any professional setting. The course aims to:

- Provide the student with skills of editing, refining, adjusting, presenting, and building virtual 3D objects.
- Encourage students to develop and present their architectural designs and creative ideas using computer.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Summarize two-dimensional drawing commands of CAD program
- (a 2) - Demonstrate understanding of the general concepts of the functioning of CAD program
- (a 3) - Demonstrate understanding of the general concepts of the functioning of SketchUp program
- (a 4) - Describe the different ways in three-dimensional modeling in AutoCAD program
- (a 5) - Express different commands to each program that are being studied

Through intellectual skills, students will be able to:

- (b 1) - Innovate alternatives three-dimensional drawings using computer programs.
- (b 2) - Create their own designs, ideas and concepts using graphic software.
- (b 3) - Suggest the most appropriate software application for a specific purpose.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Produce three-dimensional snapshots using finishes and different lighting sources.
- (c 4) - Draw using two-dimensional drawing commands and three-dimensional modeling.
- (c 5) - Produce three-dimensional models using computer.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 7) - Display imagination and creativity.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Use Network information to get the blocks to be used in the exercises.
- (d 7) - Demonstrate efficient IT capabilities.
- (d 8) - Manage tasks and resources efficiently.

5- Contents

Week No. 1	General Introduction
Week No. 2	Three-dimensional modeling using 3D AutoCAD program identify the application program interface and menus and toolbars used in modeling. Create three-dimensional models using primary ingredients modeling.
Week No. 3	Three-dimensional modeling using 3D AutoCAD program modeling using Wireframe Modeling. modeling surfaces using the Surface Modeling solid modeling using Solid Modeling (extrusion and rotation operations)
Week No. 4	Three-dimensional modeling using 3D AutoCAD program UCS coordinates. Display a three-dimensional models 3D Viewing.
Week No. 5	Three-dimensional modeling using 3D AutoCAD program Hide lines of work and shading three-dimensional models. Use commands (Union -Subtract - Intersect).
Week No. 6	Three-dimensional modeling using 3D AutoCAD program modified models three-dimensional (3D Array - Mirror 3D - Rotate 3D). modified faceted edges and sections of cut-outs (fillet, shell, Extrude faces - Move faces - Rotate faces ...).
Week No. 7	Three-dimensional modeling using 3D AutoCAD program Materials selection finishes materials. Lighting sources.
Week No. 8	Three-dimensional modeling using 3D AutoCAD program Manifesting printing Rendering & Printing. convert AutoCAD files to other formats.
Week No. 9	Using three-dimensional modeling program SketchUp The general concepts in Sketch Up program Identify the user interface and toolbars of the program.
Week No.10	Using three-dimensional modeling program SketchUp Draw simple shapes and cut-outs of specific dimensions and modified. identify how to create, save and insert components .
Week No.11	Using three-dimensional modeling program SketchUp Hide lines of work and shading three-dimensional models. identify some modified models Move - orders Rectangular Array - Rotate - Polar Array - Follow Me - Offset - Scale - Paint.
Week No.12	Using three-dimensional modeling program SketchUp identify some edit lines and surfaces orders - learn how to insert different materials and finishes. exchange files with other programs such as AutoCAD export files to other formats such as images and video files.
Week No.13	Drawing and Manifesting using PhotoShop program identification of the user interface. Identify how brushes and coloring and show horizontal Muscat.
Week No.14	Drawing and Manifesting using PhotoShop program Identify the project show how my design.
Week No.15	General revision

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination		<input checked="" type="checkbox"/> Drawing Examination	
	<input checked="" type="checkbox"/> Assignments		<input type="checkbox"/> Research and Discussions	
	<input type="checkbox"/> Oral Examination		<input type="checkbox"/> Other (to be mentioned):	
Examination Requirements	<input type="checkbox"/> Lecture Room		<input type="checkbox"/> Design Studio	
	<input checked="" type="checkbox"/> Computer Lab.		<input type="checkbox"/> Laboratory	
	<input type="checkbox"/> Specific Equipment		<input type="checkbox"/> Other (to be mentioned):	

8- Reading List

a- Text Books			
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub: publisher.
(1)			
(2)			
(3)			
(4)			
(5)			
b- References			
(1)			
(2)			
(3)			
(4)			
(5)			
c- Others			
(1)	http://sketchup.google.com/3dwarehouse		
(2)	AutoCAD 3D® Training Manual ADOBE		
(3)	PHOTOSHOP Help and tutorials		



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Contemporary Human Ecology		
Code	801444-2		
Prerequisite Course(s)	Architectural Design 7	Code	801471-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input checked="" type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Dr. Sameer Ashi		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course aims to take advantage of the values and principles of urbanism in contemporary Islamic cities and to clarify the elements and forms of urbanism. The course describes the influence of the Islamic urbanism on Islamic law and illustrates the possibility of exploiting the values and principles of urbanism derived from Islamic values and legislation on contemporary cities.

The course also identifies some serious and successful attempts (case studies) to get to the provision of urban environment in harmony with the values and principles of the Islamic communities and traditions.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Explain the concept of the environment and its impact on urbanization, and the influences that created the traditional urbanism.
- (a 2) - Describe the forms of urbanism, which was produced by the Islamic civilization in ancient Islamic communities.
- (a 3) - Describe the features and distinctive features of ancient Islamic cities and the extent to which in contemporary cities.
- (a 4) - Describe the reasons that created the modern urbanism and the extent of benefit from it to provide a contemporary urban environment consistent values and Islamic societies .
- (a 5) - Record the successful experiences in Islamic societies , which have been applied to get into the contemporary urban environments according to the requirements of the times and the requirements of contemporary Islamic societies.

Through intellectual skills, students will be able to:

- (b 1) - Merge between various developments of the times and the values and principles of Islamic societies skill away from imported or cloned solutions from other societies.
- (b 2) - Design interpersonal skills and responsibility to be development.
- (b 3) - Suggest a collective offers within specific responsibilities.

Through professional and practical skills, students will be able to:

- (c 1) - Exercise their professional work.
- (c 2) - Master the drawings of buildings preparation.
- (c 3) - Exercise supervision of the various stages of implementation of the buildings under the supervision of engineers by the engineering office.
- (c 4) - Take advantage of what was learned in previous courses of understanding of the methods of design.

Through general and transferable skills, students will be able to:

- (d 1) - Follow-up the new practices of professional work.
- (d 2) - Use the latest publications, books, periodicals and journals to learn about the practice of professional work

5- Contents

Week No. 1	Definition of the environment and its impact on urbanization formed and how the built environment in the Islamic communities
Week No. 2	Definition of the environment and its impact on urbanization formed and how the built environment in the Islamic communities
Week No. 3	Influences that created the traditional urbanism (Islamic law - climatic influences , local building materials , social, economic and political situation , technical support)
Week No. 4	Influences that created the traditional urbanism (Islamic law - climatic influences , local building materials , social, economic and political situation , technical support)
Week No. 5	Elements and forms of urbanism , which was produced by the Islamic civilization in ancient Islamic societies (through multiple examples in various Muslim countries)
Week No. 6	Elements and forms of urbanism , which was produced by the Islamic civilization in ancient Islamic societies (through multiple examples in various Muslim countries)
Week No. 7	Appearance and planning and architectural elements of the cities of Islamic societies
Week No. 8	Features distinctive features of ancient Islamic cities
Week No. 9	Features distinctive features of ancient Islamic cities
Week No.10	The possibility to take advantage of traditional urbanism in contemporary cities
Week No.11	Contemporary urbanism , the reasons for his presence , his money and what it .
Week No.12	Contemporary urbanism , the reasons for his presence , his money and what it .
Week No.13	Attempts that have been applied to reach a successful solution to provide a contemporary urban environment in accordance with the requirements of the times and that are consistent with the values and principles of the various Islamic communities
Week No.14	Attempts that have been applied to reach a successful solution to provide a contemporary urban environment in accordance with the requirements of the times and that are consistent with the values and principles of the various Islamic communities
Week No.15	Attempts that have been applied to reach a successful solution to provide a contemporary urban environment in accordance with the requirements of the times and that are consistent with the values and principles of the various Islamic communities

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input checked="" type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Abu Saada	H	2010	<i>Building and Imran</i> <i>The third millennium of the repercussions of the imagination</i>	1	Egypt	CPS
(2) Hakim	B	1989	<i>Arabic Islamic Cities Rev</i>	1		
(3) Hakim	B	2002	<i>Arabic-Islamic Cities: Building and Planning Principles</i>	1	UK	Kegan Paul International, Limited
(4) Spahic	O	2008	<i>Islam, Architecture & Urban Planning</i>	1	USA	Arah Pendidikan Sdn Bhd
(5) Jayyusi	S	2008	<i>The City in the Islamic World, Volume 94/1 & 94/2</i>	1	USA	LIBRARY OF CONGRESS
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)	DAILY NEWS PAPERS					
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Descriptive Geometry, and Shadow and Perspective		
Code	801103-2		
Prerequisite Course(s)	None	Code	
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input checked="" type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Dr. Abdulkareem Hamidaddin	Dr. Said Mansi	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	45	Hour(s) /Semester		
	Self-study	60	Hour(s) /Semester		
	Total	105	Hour(s) /Semester		
Credit Points according to ECTS	4	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The objectives of the course are to enhance spatial imagination and to describe mathematical logic of shadows and perspectives. The course explains the difference between the self and movable shade and illustrates the techniques of dropping shadows on plans, elevations, and on basic geometrical shapes. The mechanism of generating two-points perspective is described. The course covers several topics including light effects on 3D masses, geometrical proportions and consistency of shadows.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define space and its contents, and the representation of (point, rectum and the level), and the ability to drop it on three levels (vertical, horizontal and said view).
- (a 2) - Express the architectural design in 3D.
- (a 3) - Draw two-and three dimensional drawings.

Through intellectual skills, students will be able to:

- (b 1) - Represent masses and drop it on more than one level.
- (b 2) - Create ideas and concepts using high quality rendered architectural drawings.

Through professional and practical skills, students will be able to:

- (c 1) - Prepare architectural drawings and presentations.
- (c 2) - Display imagination and creativity.
- (c 3) - Appreciate the neatness and aesthetics in design and approach.
- (c 4) - Work in a multi-professional working environment.
- (c 5) - Use a wide range of analytical and technical tools
- (c 6) - Prepare, develop and present drawings using an appropriate range of visual, verbal and written media.
- (c 7) - Integrate knowledge of different fields to solve problems
- c 8) - Prepare architectural drawings and presentations

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant references effectively.
- (d 3) - Work in stressful environment and within constraints and Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Transfer techniques and solutions from one field of architecture to another.
- (d 6) - Listen and critically respond to the views of others.

5- Contents

- Week No. 1** * Preface, introduction to decision (descriptive geometry).
-Central projection or perspective.
-Projection parallel: some spatial theories.
- Week No. 2** - Representation of the point.
- Representation of the rectum.
- Week No. 3** - Representation level.
- Week No. 4** * Position issues;
1- Line intersection two levels.
2- Straight point of intersection with the level.
- Week No. 5** * Continued - position issues;
3- Representation of level passes in known point, and parallel of known level.
- Week No. 6** * Measurement Issues;
1- set the real length of the straight and the corners of his inclination on two levels (L 1, L 2).
- Week No. 7** * Continued - measurement issues;
2-column-level representation.
- Week No. 8** * continued issues of measurement:
3- Representation level of perpendicular to straight.
- Week No. 9** Shadow of the point, the imaginary point, practical exercises
- Week No.10** Shadow of the line and its different forms, practical exercises
- Week No.11** Shadow of planes, practical exercises
- Week No.12** Shadow of circles, practical exercises
- Week No.13** Shadow of mass, practical exercises
- Week No.14** Perspective, practical exercises
- Week No.15** Perspective, practical exercises

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Hashish	B.	1994	<i>The mediator in the Descriptive Geometry metric and its applications</i>	2nd	B,Lebanon	Dar Alrateb
Ching,	F.	1975	<i>Architectural Graphics.</i>	1.		Van Nostrand Reinhold Company,
Coulin,	C.	1983	<i>Step by step Perspective Drawing.</i>	1.		Van Nostrand Reinhold Company,
White	G.	1982	<i>Perspective- A Guide For Artists, Architects and Designers.</i>	1.		London: Batsford Academic And Educational LTD,
b- References						
c- Others						
Lecture Handouts						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectural Design 1		
Code	801171-5		
Prerequisite Course(s)	None	Code	None
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input checked="" type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Prof. Mohamed wahba	Dr. Tarek Abououf	
	Dr. Amr Elzawahry	Arch. Mohammad Aljifri	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester		
	Self-study	195	Hour(s) /Semester		
	Total	345	Hour(s) /Semester		
Credit Points according to ECTS	13	point(s)	Credit Hours	5	Hour(s)

3- Module Summary

This course aims at allowing the student to master technical drawings and architectural expressions using manual-drawing tools. It also aims to enable the student to study architectural spaces furnishing, and to implement the drawing scale, architectural projection, and to train the student on the different methods of presenting architectural projects.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Classify visual skills and basics of architectural design.
- (a 2) - Associate functional relations with the use of a space.
- (a 3) - Explain principles of architectural design.

Through intellectual skills, students will be able to:

- (b 1) - Apply technical and aesthetic treatments in the architectural design process.
- (b 2) - Innovate formative drawings (two or three –dimensional) based on different principles of architectural formation
- (b 3) - Apply different ways that are used to present architectural design projects.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Carry out specialized designs
- (c 4) - Display imagination and creativity.
- (c 5) - Appreciate the neatness and aesthetics in design and approach.

Through general and transferable skills, students will be able to:

- (d 1) - Work in stressful environment and within constraints.
- (d 2) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Define of Architerctural Desin& course Framwork
- Week No. 2** Exrsice 1 - Architectural Caligraphy
- Week No. 3** Exrsice 2- Geometrical Operations
- Week No. 4** Exrsice 3- Lines & shapes
- Week No. 5** Exrsice 4-Design Principals
- Week No. 6** Exrsice 4-Design Principals
- Week No. 7** Exrsice 5- Spatial Forming
- Week No. 8** Exrsice 6- Architectural Projection
- Week No. 9** Exrsice 7- Isometric
- Week No.10** Exrsice 8- PLans, Elevetions & Sections
- Week No.11** First Project- Program & Required Presentation
Site Analysis
- Week No.12** Ground Floor Sketch & Development
- Week No.13** Section & Elevation
- Week No.14** Isometric & Model
- Week No.15** Jury Preview

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input checked="" type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1) Library of Congress		1982	NOTES on ARCHITECTURE	1st	California William Kaufmann , Inc.
(2) Mills	C	2000	Designing with models	1st	NY John Willey & sons
(3) Ching	F	1996	Architecture Form Space & Order	4th	Canada John Willey & sons
(4) Abououf	T	2014	Site analysis	1st	Cairo Sky for Book
(5)					
b- References					
(1)					
(2)					
(3)					
(4)					
(5)					
c- Others					
(1)					
(2)					
(3)					



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectural Design 2		
Code	801172-5		
Prerequisite Course(s)	Architectural Design 1	Code	801171-5
Recommended Skills			
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input checked="" type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Prof. Mohamed Wahba Dr. Amr Elzawahry	Dr. Tarek Abououf Arch. Mohammad Aljifri	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester		
	Self-study	195	Hour(s) /Semester		
	Total	345	Hour(s) /Semester		
Credit Points according to ECTS	13	point(s)	Credit Hours	5	Hour(s)

3- Module Summary

The course aims to develop the student's basic architectural design skills through comprehension of the principles that affect the functional relationships and standard areas of various spaces of the architectural design. In addition to this, the student is expected to use skills acquired in the previous stages (forming two- and three-dimensional principles of architectural formation) in design. The course also aims to enhance students' skill of drawing and his ability of architectural expression using hand-drawing tools.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Mention the importance of the relationship between building and its environment and how to link them.
- (a 2) - Draw full requirements of a project with scale.
- (a 3) - Explain his Idea through sketches and study models.
- (a 4) - Demonstrate understanding of the basic steps involved in the architectural design.

Through intellectual skills, students will be able to:

- (b 1) - Design various projects in terms of environment, standards, and degree of complexity.
- (b 2) - Determine the concept of design program and how to translate it into the origin of architect.
- (b 3) - Innovate two-and three-dimensional formative configurations drawings.
- (b 4) - Efficiently design various functional relationships.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Prepare and present reports.
- (c 4) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 5) - Display imagination and creativity.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Work in stressful environment and within constraints..
- (d 3) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Course Framwork
- Week No. 2** First project beginning- introduction- Site Analysis Style
- Week No. 3** Space Relations diagram - Plan formation and development:
- Week No. 4** Section- formation and facades
- Week No. 5** first project editing and arbitration
- Week No. 6** Projects
- Week No. 7** 2nd project beginning- introduction- Site Analysis
- Week No. 8** Projects Jury & Discussions
- Week No. 9** Plans developing- Starting Layout
- Week No.10** Finishing Lay out - Design concept
- Week No.11** Vertical Sections
- Week No.12** Facades and formation in 3D- developing facades and perspectives
- Week No.13** Project compiling rehearsal- jury for criticism and analysis
- Week No.14** Projects Presentation styles- start project Reheasaling
- Week No.15** Jury Preview

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination	<input type="checkbox"/> Research and Discussions	
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Other (to be mentioned):		
	<input checked="" type="checkbox"/> Oral Examination			
Examination Requirements	<input type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio	<input type="checkbox"/> Laboratory	
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Other (to be mentioned):		
	<input type="checkbox"/> Specific Equipment			

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Nuefert	E	2009	<i>Design Fundamentals</i>	last		
(2) De Chiara	C	2000	<i>Time saver for architectural building</i>	last	NY	McGraw-Hill
(3) Abououf	T	2015	<i>Site analysis</i>	1st	Cairo	Sky For Book
(4)						
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectural Design 3		
Code	801271-5		
Prerequisite Course(s)	Architectural Design 2	Code	801172-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input checked="" type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Prof. Mohamed Atef	Dr. Ali Elmansoury	
	Dr. Farag Abd Elnaby	Dr. Talal Hammady	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester		
	Self-study	180	Hour(s) /Semester		
	Total	330	Hour(s) /Semester		
Credit Points according to ECTS	12	point(s)	Credit Hours	5	Hour(s)

3- Module Summary

This course aims mainly at raising students' mental and cognitive abilities in the field of architectural design based on module and the use of design and constructional grid. The course also aims at training students on how to analyze public buildings and other architectural projects through studying the deep relations between the different elements of the project and the architectural formation at its second and third dimension.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Demonstrate understanding of the module concept and the use of design and construction grid.

Through intellectual skills, students will be able to:

- (b 1) - Apply different design theories and methods.
- (b 2) - Create two and three dimensional forms on the bases of different formation principles.
- (b 3) - Design different functional relationship with high level of proficiency.

Through professional and practical skills, students will be able to:

- (c 1) - Give solutions to architectural design problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Develop knowledge of historical and cultural developments and their influence on modern architecture (Cultural and Historical Context)
- (c 5) - Produce various computer aided architectural drawings and demonstrate proper plotting techniques.
- (c 6) - Prepare and interpret projects using CAD techniques.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Become a good listener, speaker and a discussant.
- (d 3) - Communicate interactively and proactively when dealing with others.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Manage tasks and resources efficiently.
- (d 7) - Demonstrate efficient IT capabilities.

5- Contents

- Week No. 1** Project identification , program and a piece of land to be planned and designed .
- Week No. 2** Elements of Design,concepts , design process , and general site layout .
- Week No. 3** Elements of Design ,concepts , design process , and general site layout .
- Week No. 4** Elements of Design ,concepts , design process , and general site layout .
- Week No. 5** Site layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 6** Horizontal projections, and dtailed plans.
- Week No. 7** Site layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 8** Site layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 9** Sections , elevations and one and two points perspectives.
- Week No.10** Rendering, and finilaztion of detailed. architectural plans.
- Week No.11** Rendering, and finilaztion of detailed. architectural plans.
- Week No.12** Rendering, and finilaztion of detailed. architectural plans.
- Week No.13** Rendering, and finilaztion of detailed. architectural plans.
- Week No.14** Model building , architectural presidentation and final joury
- Week No.15** Model building , architectural presidentation and final joury

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination		<input checked="" type="checkbox"/> Drawing Examination	
	<input checked="" type="checkbox"/> Assignments		<input checked="" type="checkbox"/> Research and Discussions	
	<input checked="" type="checkbox"/> Oral Examination		<input type="checkbox"/> Other (to be mentioned):	
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room		<input checked="" type="checkbox"/> Design Studio	
	<input type="checkbox"/> Computer Lab.		<input type="checkbox"/> Laboratory	
	<input type="checkbox"/> Specific Equipment		<input type="checkbox"/> Other (to be mentioned):	

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Chiara	D.	2001	<i>Time-Saver Standards for Building Types.</i>	4	New York	Mc Graw-Hill
(2) Ernst	N	2012	<i>Neufert Architects' Data</i>	4	UK	Wily B Lackwell
(3) Sleeppe	H	2001	<i>Building Planning & Design Standards.</i>	1	New York	Wily B Lackwell
(4) Esmond	R	1984	<i>Understanding Buildings: A Multidisciplinary Approach</i>	1	New York	Library of CONGRESS
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectural Design 4		
Code	801272-5		
Prerequisite Course(s)	Architectural Design 3	Code	801271-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input checked="" type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Prof. Mohamed Atef	Dr. Ali Elmansoury Dr. Farag Abd Elnaby	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester		
	Self-study	195	Hour(s) /Semester		
	Total	345	Hour(s) /Semester		
Credit Points according to ECTS	12	point(s)	Credit Hours	5	Hour(s)

3- Module Summary

The course aims to teach student how to design medium complicated projects, concentrating on the impact of selecting construction materials and constructional systems on architecture design as a part of designing operation. This is expected to be accomplished through acquainting the student with applications of different sorts of constructional systems, so the student becomes capable of selecting the appropriate construction materials and proper constructional systems when designing architectural projects.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Classify different construction systems
- (a 2) - Specify appropriate constructional systems for different sorts of architectural projects

Through intellectual skills, students will be able to:

- (b 1) - Design creatively and emerge other related activities with design operation.
- (b 2) - Apply theories and techniques of different designs.
- (b 3) - Solve architectural problems, fetch solutions and choose the best.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Acquire artistic knowledge and perception and technical skills to express and communicate ideas graphically
- (c 5) - Carry out specialized designs and produce various computer aided architectural drawings and demonstrate proper plotting techniques.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 7) - Display imagination and creativity.

Through general and transferable skills, students will be able to:

- (d 1) - Bear responsibility of self-learning and keep on developing.
- (d 2) - Master listening, speaking and discussion.
- (d 3) - Communicate efficiently and deal positively with others.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Manage tasks and resources efficiently.
- (d 7) - Demonstrate efficient IT capabilities.

5- Contents

- Week No. 1** Project identification , program and a piece of land to be planned and designed .
- Week No. 2** Elements of Design,concepts , design process , and general site layout .
- Week No. 3** Elements of Design ,concepts , design process , and general site layout .
- Week No. 4** Elements of Design ,concepts , design process , and general site layout .
- Week No. 5** Site layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 6** Horizontal projections, and dtailed plans.
- Week No. 7** Site layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 8** Site layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 9** Sections , elevations and one and two points perspectives.
- Week No.10** Rendering, and finilaztion of detailed. architectural plans.
- Week No.11** Rendering, and finilaztion of detailed. architectural plans.
- Week No.12** Rendering, and finilaztion of detailed. architectural plans.
- Week No.13** Rendering, and finilaztion of detailed. architectural plans.
- Week No.14** Model building , architectural presidentation and final joury
- Week No.15** Model building , architectural presidentation and final joury

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Chiara	D.	2001	<i>Time-Saver Standards for Building Types.</i>	4	New York	Mc Graw-Hill
(2) Ernst	N	2012	<i>Neufert Architects' Data</i>	4	UK	Wily B Lackwell
(3) Sleepe	H	2001	<i>Building Planning & Design Standards.</i>	1	New York	Wily B Lackwell
(4) Esmond	R	1984	<i>Understanding Buildings: A Multidisciplinary Approach</i>	1	New York	Library of CONGRESS
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
 College of Engineering and Islamic Architecture
 Department of Islamic Architecture
 Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectural Design 5		
Code	801371-5		
Prerequisite Course(s)	Architectural Design 4	Code	801272-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input checked="" type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Dr. Abdulghani Monawar Arch. Abdullah Karban Arch. Mohammad Almahdi	Prof. Abo Al Abbasi Arch. Adnan Alshahrani	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester
	Self-study	210	Hour(s) /Semester
	Total	360	Hour(s) /Semester
Credit Points according to ECTS	13	point(s)	Credit Hours 5 Hour(s)

3- Module Summary

This design studio is an introduction to urban design planning. The course discusses the concepts and different levels of urban design; and its related physical, social and economic phases. An existing urban neighborhood with urban problems such as informal slums settlements are studied and analyzed in terms of land use, current situation, planning criteria, and local policies. Planning strategies and optimum solutions are discussed considering social, economic, and cultural context. The course covers topics including ethics, islamic urban behavior, and psychology of users.

4- Intended Learning Outcomes (ILOs)

a- Contribution of Learning Outcomes to Programme Outcomes			
<i>The graduate must be able to:</i>	Level of Contribution (<i>Lowest 1, Highest 3</i>)		
Have the ability to think creatively and to control and integrate the activities of other parties involved in the planning.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have the ability to think in three dimensions and to develop plans methodically, scientifically and artistically.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have the ability to bring divergent factors in accordance to each other, to integrate knowledge and to apply skills when creating a design solution.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have understanding of the social context of a construction project.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have an understanding of the ergonomic and spatial requirements of the working environ-ment.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Can identify and define functional requirements for different sectors of environment.	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
Have a sense of history and practice of landscape architecture, urban planning, regional and national planning.	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
Can apply their knowledge on natural systems and built environment.	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
Can apply their knowledge of bearing structure, materials, supply and disposal.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Can apply knowledge of design theory and design methods.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Have the ability to apply analogue and digital, graphical and model making skills making pro-jects to analyze and develop a construction plan and to convey this vividly.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have awareness of Ethics and Islamic Behavior and its Impact on Islamic Architectural personality.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Explain socio-economic change and its spatial outcomes, development and nature of land and property markets: environmental, ecological and physical change: interaction in the built and natural environments, interrelationships between land-uses and human activities in multi-dimensional space, including traffic and transport.
- (a 2) - Give examples of planning as a discipline, specialists' knowledge with some professionalism
- (a 3) - Mention the historical, cultural, sustainable and political context and principles of planning
- (a 4) - Define the consequences of design decisions on natural systems and the interrelationships between them.
- (a 5) - Associate with underlying theories: conceptual thinking, and policy formulation, evaluation and implementation.

Through intellectual skills, students will be able to:

- (b 1) - Analyze the evolution and practice of planning.
- (b 2) - Evaluate arguments, political, legal and institutional, administrative frame works and procedures in planning.
- (b 3) - Analyze planning problems effectively and be creative problem solvers.
- (b 4) - Determine gathered data and information about a certain site.
- (b 5) - Analyze the gathered data.

Through professional and practical skills, students will be able to:

- (c 1) - Collect information and make use of the evidence and sources.
- (c 2) - Prepare reports integrating social, economical, structural, constructional and environmental dimensions.
- (c 3) - Design for economic development, regional planning, sustainable development, transport planning, and urban regeneration
- (c 4) - Generate, develop and evaluate innovative Islamic urban designsolutions for various environmental problems.
- (c 5) - Integrate knowledge of deferent fields to solve problems.
- (c 6) - Prepare, develop and present drawings using an appropriate range of visual, verbal and written media.
- (c 7) - Use a wide range of analytical and technical tools.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.
- (c 9) - Prepare plans of existing, restored and newly created landscapes.

Through general and transferable skills, students will be able to:

- (d 1) - Present project in seminars or group meetings, discuss findings, defend their ideas, and communicate effectively in writing, verbally and through drawings and models.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Search for information and adopt life-long self learning.
- (d 6) - Transfer techniques and solutions from one field of architecture to another.
- (d 7) - Listen and critically respond to the views of others.
- (d 8) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Introduction, definitions and scope about neighborhood through planning levels including national, regional, city and town planning.
- Week No. 2** Project 1: Urban Design for a neighborhood : introduction and project definition.(Neighborhood, Urban pattern and urban fabric the main elements of master planning).
- Week No. 3** The neighborhood concept, Submission of the 1st research: data collection , Analysis maps (Land use map, Urban fabric map,...)
- Week No. 4** Problem analysis, Neighborhood concept (environment, economic, social and transport planning), Submission of the 1st research: similar examples, Research presentation and seminar
- Week No. 5** Sketch urban design (preliminary urban design concept) the data depending on planning criteria and propose strategies and policies to establish optimal solution.
- Week No. 6** Urban Design development: master plan in groups (three alternatives).
- Week No. 7** Urban Design development: master plan in groups (proposal strategies) .
- Week No. 8** Submission of the 1st project,
- Week No. 9** Continuation of the previous lecture and evaluation of 1st project.
- Week No.10** Project 2: introduction and project definition, (center of the neighborhood in details) .
- Week No.11** Problem analysis, in addition to a design sketch (Quiz)
- Week No.12** Conceptual urban design
- Week No.13** Design development (Criticism)
- Week No.14** Submission of Project II
- Week No.15** Project Evaluation

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input checked="" type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1)	CARMONA	M	2010	<i>Public Places Urban Spaces-The Dimensions of Urban Design</i>	2nd	Oxford, UK The Architectural Press, Elsevier
(2)	AbouOUF	T	2010	<i>Site Analysis</i>	11st	Egypt Sky for Book
(3)	SHIRVANI	H	1981	<i>The Urban Design Process</i>	2nd	New York Van Nostrand Reinhold Company
(4)	THOMPSON	G	1998	<i>Ecological Design And Planning</i>	3rd	New York Wiley, N.Y.
(5)						
b- References						
(1)	CALLENDER	J.	1982	<i>Time - Saver Standards For Urban Design Data</i>	6th	Singapore McGraw Hill
(2)	LYNCH,	K	1997	<i>A Theory of Good City Form</i>	2nd	Cambridge, The MIT Press
(3)	BERGER	M.	1960	<i>The New Metropolis in the Arab World</i>	2nd	Cairo, Egypt Congress for Cultural Freedom
(4)	BAKER	G.	1996	<i>Design Strategies in Architecture: An Approach to the Analysis of Form</i>	2nd	London, Van Nostrand Reinhold
(5)	MATSUBARA,	J.	1996	<i>Mastering New Architectural Rendering Techniques,</i>	2nd	Osaka Graphic Sha
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
 College of Engineering and Islamic Architecture
 Department of Islamic Architecture
 Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectural Design 6		
Code	801372-5		
Prerequisite Course(s)	Architectural Design 5	Code	801371-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input checked="" type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Prof. Abo Al Abbasi	Prof. Khaled Sami	
	Dr. Samir Felmban	Dr. Thamer Alharbi	Dr. Sameer Ashi
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester
	Self-study	210	Hour(s) /Semester
	Total	360	Hour(s) /Semester
Credit Points according to ECTS	13	point(s)	Credit Hours 5 Hour(s)

3- Module Summary

This studio continues the discussion of urban design planning. It aims to raise the understanding and perception of informal urban settlements and their challenges. Analysis, evaluation, and development of current urban slums are studied through a real-life case study. The urban design theories and their implication and feasibility on modern times are illustrated. The projects must exhibit clear understanding of main issues of planning including planning process (i.e. rehabilitation, upgrading, and reconstruction), environmental problems, and sustainability.

4- Intended Learning Outcomes (ILOs)

a- Contribution of Learning Outcomes to Programme Outcomes			
<i>The graduate must be able to:</i>	Level of Contribution (<i>Lowest 1, Highest 3</i>)		
1- Have the ability to think creatively and to control and integrate the activities of other parties involved in the planning.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
2- Have the ability to collect information, to define problems, to apply analysis, to judge critically and to formulate strategies for action.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
3- Have the ability to think in three dimensions and to develop plans methodically, scientifically and artistically.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
4- Have the ability to bring divergent factors in accordance to each other, to integrate knowledge and to apply skills when creating a design solution.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
9- Have the ability to develop programs for construction projects and thereby to define the needs of developers, users and the public.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
10 - Have understanding of the social context of a construction project.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
11- Have an understanding of the ergonomic and spatial requirements of the working environment.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
14- Can apply their knowledge to society, clients and users	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
15- Can identify and define functional requirements for different sectors of environment	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
19- Can apply their knowledge on natural systems and built environment.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
20- Can apply their knowledge of bearing structure, materials, supply and disposal	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
25- Can apply knowledge of design theory and design methods	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
28- Can apply knowledge of professional, business, financial and legal requirements	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
30- Have an awareness of the potential roles of architects in new and already familiar fields of action as well as in international context.	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
32- Have an understanding of professional ethics and codes of conduct relating to the exercise of profession and an understanding of legal obligations regarding the registration of an architect.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
38- Students should acquire appropriate knowledge, skills and abilities in all study schemes that aim at the licensing to work as an architect.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Explain socio-economic change and its spatial outcomes, development and nature of land and property markets: environmental, ecological and physical change: interaction in the built and natural environments, interrelationships between land-uses and human activities in multi-dimensional space, including traffic and transport.
- (a 2) - Give examples of planning as a discipline, specialists' knowledge with some professionalism
- (a 3) - Mention the historical, cultural, sustainable and political context and principles of planning
- (a 4) - Define the consequences of design decisions on natural systems and the interrelationships between them.
- (a 5) - Associate with underlying theories: conceptual thinking, and policy formulation, evaluation and implementation.

Through intellectual skills, students will be able to:

- (b 1) - Analyze the evolution and practice of planning.
- (b 2) - Evaluate arguments, political, legal and institutional, administrative frame works and procedures in planning.
- (b 3) - Analyze planning problems effectively and be creative problem solvers.
- (b 4) - Determine gathered data and information about a certain site.
- (b 5) - Analyze the gathered data.

Through professional and practical skills, students will be able to:

- (c 1) - Collect information and make use of the evidence and sources.
- (c 2) - Prepare reports integrating social, economical, structural, constructional and environmental dimensions.
- (c 3) - Design for economic development, regional planning, sustainable development, transport planning, and urban regeneration
- (c 4) - Generate, develop and evaluate innovative Islamic urban designsolutions for various environmental problems.
- (c 5) - Integrate knowledge of deferent fields to solve problems.
- (c 6) - Prepare, develop and present drawings using an appropriate range of visual, verbal and written media.
- (c 7) - Use a wide range of analytical and technical tools.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.
- (c 9) - Prepare plans of existing, restored and newly created landscapes.

Through general and transferable skills, students will be able to:

- (d 1) - Present project in seminars or group meetings, discuss findings, defend their ideas, and communicate effectively in writing, verbally and through drawings and models.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Search for information and adopt life-long self learning.
- (d 6) - Lead and motivate individuals.
- (d 7) - Listen and critically respond to the views of others.
- (d 8) - Manage tasks and resources efficiently.
- (d 9) - Transfer techniques and solutions from one field of architecture to another.

5- Contents

- Week No. 1** Introduction, definitions and scope about Slum areas and informal buildings
- Week No. 2** Stage1: Preliminary studies and the collection of information and field surveys
- Week No. 3** Submission of the 1st research: data collection , Analysis maps (Land use map, Urban fabric map,...)
- Week No. 4** Problem analysis, Planningconcept (environment, economic, social and transport planning), Submission of the 1st research: similar examples, Research presentation and seminar
- Week No. 5** Sketch urban planning (preliminary urban planning concept) the data depending on planning criteria and propose strategies and policies to establish optimal solution.
- Week No. 6** Urban planning development: master plan in groups (three alternatives).
- Week No. 7** Urban planning development: master plan in groups (proposal strategies) .
- Week No. 8** Submission of the 1st Stage,
- Week No. 9** Continuation of the previous Stage and lecture and evaluation of 1st project.
- Week No.10** Project 2: introduction and project definition, (Identify trends and strategies for renewal and development) .
- Week No.11** Problem analysis, in addition to a design sketch (Quiz)
- Week No.12** Regeneration with conservation approaches
- Week No.13** Regeneration through gentrification and renovation
- Week No.14** Socio-Culture-led regeneration
- Week No.15** Submission of Project II and Project general Evaluation

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input checked="" type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1)	CARMONA	M	2010	<i>Public Places Urban Spaces-The Dimensions of Urban Design</i>	2nd	Oxford, UK The Architectural Press, Elsevier
(2)	AbouOUF	T	2010	<i>Site Analysis</i>	11st	Egypt Sky for Book
(3)	SHIRVANI	H	1981	<i>The Urban Design Process</i>	2nd	New York Van Nostrand Reinhold Company
(4)	THOMPSON	G	1998	<i>Ecological Design And Planning</i>	3rd	New York Wiley, N.Y.
(5)						
b- References						
(1)	CALLENDER	J.	1982	<i>Time - Saver Standards For Urban Design Data</i>	6th	Singapore McGraw Hill
(2)	LYNCH,	K	1997	<i>A Theory of Good City Form</i>	2nd	Cambridge, The MIT Press
(3)	BERGER	M.	1960	<i>The New Metropolis in the Arab World</i>	2nd	Cairo, Egypt Congress for Cultural Freedom
(4)	BAKER	G.	1996	<i>Design Strategies in Architecture: An Approach to the Analysis of Form</i>	2nd	London, Van Nostrand Reinhold
(5)	MATSUBARA,	J.	1996	<i>Mastering New Architectural Rendering Techniques,</i>	2nd	Osaka Graphic Sha
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectura Design 7		
Code	801471-5		
Prerequisite Course(s)	Architectura Design 6	Code	801372-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input checked="" type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Prof. Abdulhamed Albis Dr. Thamer Alharbi	Prof. Magdy El-Bastawisy Prof. Khaled Barashed	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester		
	Self-study	195	Hour(s) /Semester		
	Total	345	Hour(s) /Semester		
Credit Points according to ECTS	13	point(s)	Credit Hours	5	Hour(s)

3- Module Summary

This design studio introduces the basic knowledge of architectural professional practice. Development of design and fulfilling owner's requirements are discussed and exercised. This course prepares students to experience the working environment of architectural offices through team works, collaboration and communication. The application of Islamic laws, tradition, and concepts on projects are encouraged at this level of design studio.

4- Intended Learning Outcomes (ILOs)

a- Contribution of Learning Outcomes to Programme Outcomes			
<i>The graduate must be able to:</i>	Level of Contribution (<i>Lowest 1, Highest 3</i>)		
1. Have the ability to think creatively and to control and integrate the activities of other parties involved in the planning.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
2. Have the ability to collect information, to define problems, to apply analysis, to judge critically and to formulate strategies for action.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
3. Have the ability to think in three dimensions and to develop plans methodically, scientifically and artistically.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
4. Have the ability to bring divergent factors in accordance to each other, to integrate knowledge and to apply skills when creating a design solution.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
9. Have the ability to develop programmers for construction projects and thereby to define the needs of developers, users and the public.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
10. Have understanding of the social context of a construction project.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
11. Have an understanding of the ergonomic and spatial requirements of the working environment.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
14. Can apply their knowledge to society, clients and users.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
15. Can identify and define functional requirements for different sectors of environment.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
19. Can apply their knowledge on natural systems and built environment.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
20. Can apply their knowledge of bearing structure, materials, supply and disposal.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
25. Can apply knowledge of design theory and design methods.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
28. Can apply knowledge of professional, business, financial and legal requirements.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
30. Have an awareness of the potential roles of architects in new and already familiar fields of action as well as in international context.	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
32. Have an understanding of professional ethics and codes of conduct relating to the exercise of profession and an understanding of legal obligations regarding the registration of an architect.	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
36. Have the ability to apply analogue and digital, graphical and model making skills making projects to analyze and develop a construction plan and to convey this vividly.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
38. Students should acquire appropriate knowledge, skills and abilities in all study schemes that aim at the licensing to work as an architect.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
39. Have awareness of Ethics and Islamic Behavior and its Impact on Islamic Architectural personality.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Select issues related to a real project.
- (a 2) - Define nature of dialogue with clients.
- (a 3) - List project requirements.

Through intellectual skills, students will be able to:

- (b 1) - Create suitable architectural concepts to clients
- (b 2) - Evaluate economic and practical design solution
- (b 3) - Suggest suitable technical design systems and approaches

Through professional and practical skills, students will be able to:

- (c 1) - Suggest design solutions to match municipality regulations and roles
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 5) - Display imagination and creativity.
- (c 6) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Collaborate effectively within multidisciplinary team.
- (d 2) - Communicate effectively.
- (d 3) - Convince clients effectively
- (d 4) - Lead and motivate individuals.
- (d 5) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Searching for a real project from public and private sectors
- Week No. 2** Communicating with clients for data collection
- Week No. 3** Defining and preparing final project space program
- Week No. 4** Analyzing and surveying project site
- Week No. 5** Submitting and discussing site analysis report
- Week No. 6** Providing project analysis
- Week No. 7** Proposing design sketches and concepts
- Week No. 8** Proposing design sketches and concepts
- Week No. 9** Developing design concepts to architectural plans
- Week No.10** Developing and preparing architectural plans
- Week No.11** Developing and preparing architectural plans and sections
- Week No.12** Developing and preparing architectural sections
- Week No.13** Developing and preparing architectural sections and façades design
- Week No.14** Developing 3D images
- Week No.15** Providing final presentation in presence of project client

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
	SURNAME,	Initials. (pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1)						Mc Graw-Hill
(2)						Wiley & Sons, Inc.
(3)						
(4)						
(5)						
b- References						
(1)	Crosbie	M 2005	Tim- Saver :Standaeds for Architectural Design Data	8 th	New York USA	McGraw-Hill
(2)	Neufert	E 2012	Neufert Standard Architects' Data	4 th	New York USA	Wiley-BlackWell
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Architectural Design 8		
Code	801472-5		
Prerequisite Course(s)	Architectural Design 7	Code	801471-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input checked="" type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Arch. Gameel Al-Salafi Dr. Abdulghani Monawar	Prof. Magdy El-Bastawisy Prof. Ehab Rached	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	150	Hour(s) /Semester		
	Self-study	300	Hour(s) /Semester		
	Total	450	Hour(s) /Semester		
Credit Points according to ECTS	16	point(s)	Credit Hours	5	Hour(s)

3- Module Summary

This studio course aims to exploit the knowledge and skills acquired during the years of study in Islamic Architecture. Projects must exhibit comprehensive understanding of architectural design. It reviews the graduation research, analyzes project sites, categorizes design elements, and aligns functional relationships. The course focuses on the concept of sustainability in architecture and how to achieve it in the project.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Describe multidisciplinary projects.
- (a 2) - Interpret similar mega projects implications.
- (a 3) - Classify project requirements according to previous research studies.
- (a 4) - Explain different architectural school approaches.

Through intellectual skills, students will be able to:

- (b 1) - Create different design ideas and concepts.
- (b 2) - Differentiate between different design concepts implications.
- (b 3) - Implement innovative concepts.
- (b 4) - Evaluate design alternatives.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Carry out specialized designs.
- (c 5) - Work in a multi-professional working environment.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 7) - Display imagination and creativity.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in efficient environment
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Manage tasks and resources efficiently.
- (d 7) - Acquire architect's identity

5- Contents

- Week No. 1** Suming up project inputs previously prepared
- Week No. 2** Finalizing final space program
- Week No. 3** Proposing architectural ideas and concepts
- Week No. 4** Developing architectural ideas and concepts
- Week No. 5** Analyzing and determining final architectural concept
- Week No. 6** Developing design concepts to architectural plans
- Week No. 7** Developing design concepts to architectural plans
- Week No. 8** Preparing architectural plans
- Week No. 9** Preparing architectural plans and developing architectural sections
- Week No.10** Developing and preparing architectural sections
- Week No.11** Preparing architectural sections and and developing architectural façades design
- Week No.12** Developing and preparing architectural façades design and 3D images
- Week No.13** Developing 3D images
- Week No.14** Preparing final architectural project
- Week No.15** Preparing final architectural project

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination		<input checked="" type="checkbox"/> Drawing Examination	
	<input checked="" type="checkbox"/> Assignments		<input checked="" type="checkbox"/> Research and Discussions	
	<input checked="" type="checkbox"/> Oral Examination		<input type="checkbox"/> Other (to be mentioned):	
Examination Requirements	<input type="checkbox"/> Lecture Room		<input checked="" type="checkbox"/> Design Studio	
	<input type="checkbox"/> Computer Lab.		<input type="checkbox"/> Laboratory	
	<input type="checkbox"/> Specific Equipment		<input type="checkbox"/> Other (to be mentioned):	

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1)						
(2)						
(3)						
(4)						
(5)						
b- References						
(1)	Crosbie	M	2005	Tim- Saver :Standaeds for Architectural Design Data	8 th	New York USAMcGraw-Hill
(2)	Neufert	E	2012	NeufertStandard Architects' Data	4 th	New York USAWiley-BlackWell
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Design Process and Methods		
Code	801112-2		
Prerequisite Course(s)	None	Code	None
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input checked="" type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Dr. Tarek Abououf		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	60	Hour(s) /Semester		
	Total	90	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings:

Identify and define the design problem, the study of logical thinking steps to reach the optimal solution to the problem, factors affecting the design, design process in small buildings, technical methods as a means of assisting in the design process, the standard calendar and decision making. The course is also focusing on analysis of the components of the project , private network design, elements relations, environmental factors affecting design, coordination of the site and building, environmental control in the design process, decision making in design concept and styles of presenting ideas of design in architecture.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define design process.
- (a 2) - Illustrate form and order.
- (a 3) - Explain the progression of design.
- (a 4) - Define space and relationship between spaces.

Through intellectual skills, students will be able to:

- (b 1) - Apply steps of designs.
- (b 2) - Implement linking spaces.
- (b 3) - Solve design problems.
- (b 4) - Analyze plans and spaces.
- (b 5) - Evaluate design ideas.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Display imagination and creativity.
- (c 6) - Appreciate the neatness and aesthetics in design and approach.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Collaborate effectively within multidisciplinary team.

5- Contents

Week No. 1 Introduction of the curriculum and definitions

Week No. 2 Systematic design process

Week No. 3 Pre-design procedure

Week No. 4 Preparation of a design program

Week No. 5 Site analysis

Week No. 6 Area-Needs Analysis

Week No. 7 Design principle

Week No. 8 Design with Modular.

Week No. 9 Sketching

Week No.10 Architectural space and Form

Week No.11 spatial relations / expression tools

Week No.12 2D Forming

Week No.13 3D Forming

Week No.14 Design Criteria

Week No.15 Presentation and assessment

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Ching	F.	2015	<i>Architecture : form, space, & order</i>	4	New Jersey	Wiley
(2) VanDyke	S.	-----	<i>Form Line to Design</i>	1	Arizona	PDA,
(3) White	E.	1975	<i>Concept Sourceboo; a vocabulary of architectural forms</i>	1	USA	Architectural Media
(4) Clark & Pause	R.,	2005	<i>Precedents in Architecture: Analytic Diagrams Formative Ideas, & Partis</i>	3	Canada	Wily
(5) Abou Ouf	T.	2014	<i>Site Analysis</i>	1	Egypt	Sky for book
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Graduation Research Project		
Code	801418-2		
Prerequisite Course(s)	Architectural Design 6	Code	801372-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input checked="" type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Atef	Dr. Mohamed Abouliela	
Lecturer(s)	Prof. Magdy El-Bastawisy Arch. Abdullah Karban	Prof. Khaled Barashed Arch. Adnan Alshahrani	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	60	Hour(s) /Semester		
	Total	90	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course aims to focus on the essence of scientific research, knowledge, definition, importance, objectives, characteristics and obstacles. Later students are exposed to types, methodology, elements, stages and samples in scientific research. The second part of the course focuses on the preparation of the graduation project report consisting of historical background about the project in addition to analysing architectural concepts, design criteria, standards, famous case studies, site selection process and the proposed architectural program.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Build about how to conduct a scientific research
- (a 2) - Appreciate the importance of research for human beings
- (a 3) - Demonstrate understanding of types of research

Through intellectual skills, students will be able to:

- (b 1) - Make use of similar research in their own projects
- (b 2) - Solve specific problems of certain interest
- (b 3) - Introduce architectural design approaches based on research literature

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Work in a multi-professional working environment.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Appreciate the neatness and aesthetics in design and approach.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Introduction to the Graduation Research Project
- Week No. 2** Explaining importance, objectives and characteristics of scientific research
- Week No. 3** Discussing types of scientific research
- Week No. 4** Discussing types of scientific research
- Week No. 5** Presenting types of scientific research methodology
- Week No. 6** Introducing stages , elements, samples and methods of primary data collection
- Week No. 7** Explaining case studies for scientific research
- Week No. 8** Discussing chapters of the Graduation Research Project
- Week No. 9** Historical analysis of the graduation project
- Week No.10** Architectural concepts and design criteria
- Week No.11** Standards and specifications
- Week No.12** Studying and analyzing case studies
- Week No.13** Proposed approaches and concepts of graduation project
- Week No.14** Site selection and project architectural and spatial program
- Week No.15** Student presentations

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination		<input type="checkbox"/> Drawing Examination	
	<input type="checkbox"/> Assignments		<input checked="" type="checkbox"/> Research and Discussions	
	<input checked="" type="checkbox"/> Oral Examination		<input type="checkbox"/> Other (to be mentioned):	
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room		<input type="checkbox"/> Design Studio	
	<input type="checkbox"/> Computer Lab.		<input type="checkbox"/> Laboratory	
	<input type="checkbox"/> Specific Equipment		<input type="checkbox"/> Other (to be mentioned):	

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1)						
(2)						
(3)						
(4)						
(5)						
b- References						
(1)	Turabian	K.	2013	<i>A Manual for Writers of Research Papers, Theses, and Dissertations,</i>	8 th	Chicago University Of Chicago Press
(2)	Lawson	B.	2005	<i>How Designers Think: The Design Process Demystified</i>	4 th	London Routledge
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
 College of Engineering and Islamic Architecture
 Department of Islamic Architecture
 Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	History of Architecture		
Code	801115-2		
Prerequisite Course(s)	None	Code	None
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input checked="" type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Dr. Ali Elmansoury		
Language	<input checked="" type="radio"/> Arabic <input type="radio"/> English <input type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester
	Self-study	45	Hour(s) /Semester
	Total	75	Hour(s) /Semester
Credit Points according to ECTS	3	point(s)	Credit Hours 2 Hour(s)

3- Module Summary

The course comprises the followings:
 Definition of primitive architecture (the old stone ages), Egyptian architecture (old – middle- modern Pharaonic), Mesopotamian architecture (Sumerian-Assyrian-Babylonian –modern Babylonian- Sasanian Empire), Greek architecture (ancient Greek), Roman architecture, Byzantine architecture and the dawn of Christianity and medieval architecture (Romancek-Gothic), in addition to medieval architecture in Europe.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define architectural elements of different periods and interpret architectural theory during the period and their effect on the architectural ideas and thinking through contemporary era.
- (a 2) - Distinguish between the different factors which affect architecture & standards of successful architectural work and demonstrate the identification of the history and theory of architecture during the period.
- (a 3) - Classify the different factors which affect architecture and the successful contemporary architectural work

Through intellectual skills, students will be able to:

- (b 1) - Integrate architectural design with the various architectural trends and historical theories
- (b 2) - Determine the reflection of the society & civilization on the architectural design components and formatio
- (b 3) - Evaluate and comprehend the fundamental principles present in relevant precedents of architectures and to make choices regarding the incorporation of such principles into architecture and urban design projects today.
- (b 4) - Analyze and 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

Through professional and practical skills, students will be able to:

- (c 1) - Use a wide range of analytical and technical tools.
- (c 2) - Prepare and present reports.
- (c 3) - Display imagination and creativity.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Collaborate effectively within multidisciplinary team.

5- Contents

Week No. 1 Explain the curriculum

Week No. 2 Primitive architecture

Week No. 3 Egyptian architecture1/1

Week No. 4 Egyptian architecture1/2

Week No. 5 Mesopotamian architecture1/1

Week No. 6 Mesopotamian architecture1/2

Week No. 7 Greek architecture1/1

Week No. 8 Greek architecture1/2

Week No. 9 Roman architecture1/1

Week No.10 Roman architecture1/2

Week No.11 Byzantine architecture

Week No.12 Alromancekarchitecture

Week No.13 Gothicarchitecture

Week No.14 Christianityarchitecture

Week No.15 Medieval architecture

Continuous Assessment	35 %	Final Exam	50 %
Mid-term Exam	15 %	Total	100 %

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1) Allsopp, B	1971	<i>A General History of Architecture</i>	London	
(2) Fletcher, B	1987	<i>A History of Architecture</i>	London	Butterworth Group
(3) Giedion, S	1964	<i>The Beginnings of Architecture</i>	New York	
(4) Hoar, F	1967	<i>European Architecture From Earliest Times to the Present Day</i>	London	
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1)				
(2)				
(3)				



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Housing		
Code	801231-2		
Prerequisite Course(s)	Architectural Design 3	Code	801271-5
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input checked="" type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Samy	Prof. Abdo Absi	
Lecturer(s)	Dr. Amr Elzawahry		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The main aim of the course is that the student understands the basic concepts and issues related to housing. The student should be able to define the main definitions like: housing - shelter- dwelling, the population, area density, etc. The student discusses the types of housing problems and solutions, the factors that affect the design of the housing unit and the neighborhood residential areas. The course presents housing Requirements (Social – Urban - Economical - environmental), Criteria & Design Considerations .This course illustrates types of housing projects (Land subdivisions Projects & Integrated Projects) and housing site analysis. It focuses on the concept of the Neighborhood, NBHD Services & its road Network.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Describe basic principles of housing.
- (a 2) - Identify population in neighborhood.
- (a 3) - Give examples about Housing recommendation and standards.
- (a 4) - Name factors in Housing Unit and Neighborhood Housing.
Define housing problems and solutions

Through intellectual skills, students will be able to:

- (b 1) - Analyze housing types and their problems.
- (b 2) - Design the plan of neighborhood.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Carry out specialized designs.
- (c 6) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.

5- Contents

- Week No. 1** Introduction & definitions
- Week No. 2** Housing Problems & Solutions
- Week No. 3** House Elements & Analyze its Spaces
- Week No. 4** Housing Site Analysis
- Week No. 5** Housing Types- Concept & Classifications
- Week No. 6** Housing Types - Analysis
- Week No. 7** Comparing Between Housing Types
- Week No. 8** Housing Projects 1 –Land subdivisions Projects
- Week No. 9** Housing Projects 2 -Integrated Projects
- Week No.10** Law & housing Code Considerations, Criteria & Standards
- Week No.11** The Neighborhood - Lec1- Concept , definitions, Forming
- Week No.12** The Neighborhood - Lec 2 -Network
- Week No.13** The Neighborhood - Lec 3- Services
- Week No.14** The Neighborhood - Lec 4- House Analysis & Components
- Week No.15** Final Exam

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input checked="" type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) De Chiara	J	1995	<i>Time saver for housing & residential development</i>	1st	USA	McGrawhill
(2) التوني	س	1984	<i>في تصميم و تخطيط المناطق السكنية</i>	1 st	القاهرة	---
(3) Russ	H	2002	<i>site planning & Design Handbook</i>	1st	USA	Mc grawhill
(4) Abououf	T	2014	<i>Site Analysis</i>	1st	Cairo	Sky for Book
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Interior Space Design		
Code	801361-2		
Prerequisite Course(s)	Architecture Design 5	Code	801371-5
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input checked="" type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	Prof. Abdulhamed Albis		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

Space is the essential element in interior design. This space gives life to the architecture which houses it. This course is a visual study of the nature of this interior setting. The course comprises the followings: Fundamental element which make up our interior environments. Characteristics of each element. Emphasis is placed on basic design principals and how design relationships determine the functional, structural, and aesthetic qualities of interior spaces. Study of the design process.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Classify defining space with horizontal and vertical elements
- (a 2) - Describe spatial relationships and spatial organization
- (a 3) - Explain using colors in modern and post modern architecture

Through intellectual skills, students will be able to:

- (b 1) - Analyze interior space in classic architecture
- (b 2) - Evaluate muslim concept of space
- (b 3) - Compare between traditional, modern and post modern architecture

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Use a wide range of analytical and technical tools.
- (c 3) - Prepare and present reports.
- (c 4) - Carry out specialized designs.
- (c 5) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 6) - Display imagination and creativity.
- (c 7) - Appreciate the neatness and aesthetics in design and approach.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Manage tasks and resources efficiently.
- (d 6) - Demonstrate efficient IT capabilities.

5- Contents

- Week No. 1** Definition of interior space
- Week No. 2** Defining space with horizontal elements
- Week No. 3** Defining space with vertical elements
- Week No. 4** Interior space classification
- Week No. 5** Spatial relationships
- Week No. 6** Spatial organization
- Week No. 7** Historical analysis of interior space
- Week No. 8** Short study of the muslim concept of space
- Week No. 9** Interior space in the modern, late modern and post modern architecture
- Week No.10** Definition of color and its influence in interior design
- Week No.11** The importance of color in the architecture
- Week No.12** Different phenomena in color
- Week No.13** Using colors in different spaces
- Week No.14** Historical analysis of using color in classic architecture
- Week No.15** Using colors in modern and post modern architecture

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Ching	F	1996	<i>Architecture, form, space and order</i>	3 rd	NY	VNR Co.
(2) Rafat	A	2007	<i>Content and form, between rationalism and romanticism</i>	1 st		
(3) Michell	G	1995	<i>Architecture of the islamic world</i>	1 st		
(4) Walter	C	2000	<i>Color planning for hospital and schools</i>	1 st	USA	Granvill
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Islamic Architecture		
Code	801116-2		
Prerequisite Course(s)	History of Architecture	Code	801115-2
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input checked="" type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Dr. Ali Elmansoury		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

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. The course covers the genesis of the architecture in the Islamic city such as; Medina, Baghdad, Cairo, as well as religious buildings (mosques and doctrinal schools), buildings of services (Khankawat, Hospice, Kuttab and Bimaristan), and residential buildings. On the other hand, the course reviews pioneers of the contemporary Islamic Arabic architecture, in addition to international organizations and institutions and their role in the maintenance and development of Islamic architecture.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define architectural elements of different periods and interpret architectural theory during the Islamic period and their effect on the architectural ideas and thinking through contemporary era in the Islamic world.
- (a 2) - Distinguish between the different factors which affect architecture & standards of successful Islamic architectural work and demonstrate the identification of the history and theory of architecture during the Islamic period.
- (a 3) - Classify the different factors which affect Islamic architecture and the successful contemporary architectural work.

Through intellectual skills, students will be able to:

- (b 1) - Integrate architectural design with the various Islamic architectural trends and historical theories.
- (b 2) - Analyze the old and recent Islamic architectural works and make use of them.
- (b 3) - Determine the reflection of the society & civilization on the Islamic architectural design components and formation.
- (b 4) - Evaluate and comprehend the fundamental principles present in relevant precedents of Islamic architectures and to make choices regarding the incorporation of such principles into architecture and urban design projects today.
- (b 5) - Analyze and 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.

Through professional and practical skills, students will be able to:

- (c 1) - Collect information from different resources to support scientific thinking and opinions in architectural discussion.
- (c 2) - Prepare reports integrating social, economical, structural, constructional and environmental dimensions.
- (c 3) - Assess an architectural work and recognize its weaknesses and strengths based on student study of Islamic architecture.
- (c 4) - Generate, develop and evaluate innovative Islamic architecture solutions for various environmental problems.
- (c 5) - Integrate knowledge of different fields to solve problems.
- (c 6) - Prepare, develop and present drawings using an appropriate range of visual, verbal and written media.
- (c 7) - Use a wide range of analytical and technical tools.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.
- (c 9) - Assess an architectural work and recognize its weaknesses and strengths based on student study of Islamic architecture.

Through general and transferable skills, students will be able to:

- (d 1) - Present research in seminars or group meetings, discuss findings, defend their ideas, and communicate effectively in writing, verbally and through drawings and models.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Search for information and adopt life-long self learning.

5- Contents

- | | |
|-------------------|---|
| Week No. 1 | The Islamic World: Introduction, Geographical and Historical introduction |
| Week No. 2 | The Islamic City : Introduction about the urban fabric of Islamic city .Case studies :Damascus, Baghdad, Cairo and Jeddah. |
| Week No. 3 | Islamic House: Introduction about Social & religious factors. Study of the elements of an Islamic house. Architectural examples: Al Sehami House Cairo Egypt - Nasief House Jeddah KSA |
| Week No. 4 | Umayyad Period: Introduction about Social & Religious factors. Case studies: Umayyad Mosque (great Mosque)- Damascus, Dome of the Rock- Jerusalem |
| Week No. 5 | Umayyad Arch. in Spain & North Africa: Introduction about Cordoba great Mosque- Quairawan great Mosque. |
| Week No. 6 | Abbasid & Tulunid Periods: Introduction about Social & Religious factors. Architectural examples: Great Mosque –Samarra - Iraq , Mosque of Ahmed Ibn Tulun - Cairo |
| Week No. 7 | Fatimid Period I: Introduction and architectural examples: Cairo Gates, Al-Azhar Mosque – Cairo: Al-Aqmar Mosque -Cairo |
| Week No. 8 | Fatimid Period II: Architectural examples; Mosque of El-Guyushi – Cairo, Mosque of Al-Hakim – Cairo, Mosque of Al-Salih Talai – Cairo |
| Week No. 9 | Continuation of the previous lecture and evaluation of Assignment , Research presentation and seminar |
| Week No.10 | Ayyubid Period: Introduction about Social & Religious Factors. Architectural examples: Madrasa of al – Malik as Salih Najmad Al– Dim Ayyub, Salah El Din Citadel, Cairo |
| Week No.11 | Bahrid – Mamluk Period: Introduction about Social & Religious factors. Architectural examples: Hospital Mausoleum and Madrasa of Qalaun, Cairo Examples: Funerary complex of Sultan Hassan, Cairo |
| Week No.12 | Suljuq - Mamluk Period: Introduction about Social & religious factors. Architectural examples: Madrasa and Mausoleum of Sultan Barquq, Cairo. Madrasa and Mausoleum of Sultan Qayitbay |
| Week No.13 | Ottoman Period – Muhammad Ali Period: Introduction about Social & religious factors. Architectural |
| Week No.14 | Examples: Complex of Selimiye, Edirn. Complex of Suleymaniye Mosque, Istanbul. Mosque of Muhammad Ali – Cairo. Mosque of Sinnan – Cairo |
| Week No.15 | Public Buildings: Introduction about Social & religious factors. Architectural examples: Wequalah – Public thermae – Sabil and Kottab |

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input checked="" type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1)	ABOUSEIF	D.B	1992	<i>Islamic Architecture In Cairo: an Introduction</i>	2nd	AUC,Cairo Leiden: E.J.Brill
(2)	HILLENBRAND	R.	1999	<i>Islamic Art and Architecture</i>	1st	London,UK Thames & Hudson Ltd.,
(3)	OKASHA	T.	1985	<i>Islamic Architecture</i>	2nd	Cairo,Egy. Dar El-Maarif
(4)	DAVIDSON	C.	1998	<i>Legacies for the Future: Contemporary Architecture in Islamic Societies</i>	1st	London,UK Thames & Hudson
(5)						
b- References						
(1)	FLETCHER'S	C.D	1996	<i>A History of Architecture</i>	20th	London,UK Architectural Press Books, Oxford
(2)	WILSON	E.	1988	<i>Islamic Designs</i>	3rd	London,UK British Museum Pub
(3)	MICHELL	G.	1978	<i>Architecture of Islamic World</i>	2nd	London,UK Thames & Hudson,
(4)	GOO DWIN	G.	1971	<i>A History of Ottoman Architecture</i>	1st	London,UK Thames & Hudson
(5)	SERAGELDIN	I.	1996	<i>Architecture of the Contemporary Mosque</i>	1st	London,UK Academic Press
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Islamic Science for Architects		
Code	801216-2		
Prerequisite Course(s)	Architectural Design 2	Code	801172-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input checked="" type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Arch. Gameel Al-Salafi		
Language	<input checked="" type="radio"/> Arabic <input type="radio"/> English <input type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Starting with general introduction including course objectives, the final outputs, the purpose of Allah creation of human, wisdom of sending messengers, neighbors rights, individual residence and family residence. Discussing some basic fundamentals in Sharea such as the provisions of the right of the passage and the disposition of the corridor (public roads), the disposition of special corridor (private road), planning of cities with more concern about most prominent elements and components and the role of architects.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Illustrate neighbor right in Islam.
- (a 2) - Explain single home components and family home components.
- (a 3) - Illustrate proceeding in the public roads.
- (a 4) - Illustrate proceeding in the arterials street.
- (a 5) - Describe formation of city and planning principles in Islam.

Through intellectual skills, students will be able to:

- (b 1) - Analyze formation of city and planning principles in Islam.
- (b 2) - Analyze the most prominent elements and components in the Islamic cities

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Collaborate effectively within multidisciplinary team.

5- Contents

- Week No. 1** Knowing why Allah has created the universe? The purpose of sending his messengers.
- Week No. 2** The five main need in Islam.
- Week No. 3** Neighbor right in Islam.
- Week No. 4** Veil (Hijab) in Islam.
- Week No. 5** Single home components and Family home components.
- Week No. 6** Traffic right provisions in Islam.
- Week No. 7** First section: proceeding in the public roads (Part 1).
- Week No. 8** First section: proceeding in the public roads (Part 2).
- Week No. 9** First section: proceeding in the public roads (Part 3).
- Week No.10** Second section: proceeding in the arterials street (Part 1).
- Week No.11** Second section: proceeding in the arterials street (Part 2).
- Week No.12** Formation of city and planning principles in Islam.
- Week No.13** The most prominent elements and components in the Islamic cities (Part 1).
- Week No.14** The most prominent elements and components in the Islamic cities (Part 2).
- Week No.15** The most prominent elements and components in the Islamic cities (Part 3).
Dereliction from the Architect. (Tort of Architect).

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books			
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub: publisher.
(1)			
(2)			
(3)			
(4)			
(5)			
b- References			
(1)			
(2)			
(3)			
(4)			
(5)			
c- Others			
(1)	Lectures handout.		
(2)			
(3)			



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Islamic Sciences: Application in Environment		
Code	801443-2		
Prerequisite Course(s)	Architectural Design 6	Code	801372-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input checked="" type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Dr. Talal Hammadi		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Various environmental concepts, Technical concept as a tool to shape our environment, The transformation of the agricultural society to an industrial society and its impact on the environment, Post-industrial era and the transition to the information society , The new shape of the built environment. Furthermore, it comprises the major threats to the environment of the earth , The concept of Islam for the environment and position them, Themes that can architect of which contribute to the preservation of the environment, The impact of information and communication technology revolution of the architectural profession

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Illustrate various environmental concepts.
- (a 2) - Illustrate post-industrial era and the transition to the information society.
- (a 3) - Illustrate the new shape of the built environment .
- (a 4) - Illustrate the major threats to the environment of the earth.

Through intellectual skills, students will be able to:

- (b 1) - Analyze the concept of Islam for the environment and position them.
- (b 2) - Analyze themes that can architect of which contribute to the preservation of the environment
- (b 3) - Analyze the impact of information and communication technology revolution of the architectural profession
- (b 4) - Compare between technical concepts as a tool to shape our environment.

Through professional and practical skills, students will be able to:

- (c 1) - Have an understanding of topics such as environmental sustainability, plans to reduce energy consumption, impact on the environment and an understanding of passive systems and their control
- (c 2) - Have an awareness of technology and technological consequences.
- (c 3) - Have a sense of history and practice of landscape architecture, urban planning, regional and national planning.
- (c 4) - Can apply their knowledge on natural systems and built environment.
- (c 5) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Can apply knowledge of professional, business, financial and legal requirements.
- (d 2) - Have an awareness of the potential roles of architects in new and already familiar fields of action as well as in international context.
- (d 3) - Have an understanding of professional ethics and codes of conduct relating to the exercise of profession and an understanding of legal obligations regarding the registration of an architect.
- (d 4) - Have the ability to work in teams and communicate ideas by means of speech, text, drawings, models and statistics.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Manage tasks and resources efficiently.

5- Contents

Week No. 1	Comprehensive Introduction and General pave the seminars school : the environment and its divisions , types and their definition , the reasons that led to the world's attention to the environment, examples of existing efforts to preserve the environment , the three revolutions that Aistha human : " agricultural , industrial , information technology ," the phenomenon of globalization , the concept of technical , impact on the formation of the built environment .
Week No. 2	Environmental pollution
Week No. 3	The ozone hole
Week No. 4	Development and environment / natural resource depletion
Week No. 5	Waste recycling
Week No. 6	Islam's position on the environment
Week No. 7	The population explosion
Week No. 8	Information and communication technology revolution
Week No. 9	Cities and smart buildings
Week No.10	Globalization
Week No.11	World Trade Organization
Week No.12	The future of the human environment
Week No.13	The architect 's role in preserving the environment and in dealing with the information revolution .
Week No.14	The architect 's role in preserving the environment and in dealing with the information revolution .
Week No.15	The architect 's role in preserving the environment and in dealing with the information revolution .

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input checked="" type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Krygiel	E	2008	<i>Introducing Revit Architecture</i>	1	Cdr	Sybex
(2) Paul	F	2009	<i>-Mastering Autodesk Revit Building</i>	1		
(3) George	O	2012	<i>-Mastering AutoCAD3D</i>	1		Inc; Bk&Disk
(4) Timothy	S	2010	<i>3D AutoCAD 2012: One Step at a Tim</i>			
(5)		2009	<i>Mastering Autodesk 3ds Max Design</i>			
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)	DAILY NEWS PAPER					
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Landscape Architecture		
Code	801335-2		
Prerequisite Course(s)	Architectural Design 5	Code	801371-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input checked="" type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Dr. Talal Hammadi		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

Eight types of urban open space are discussed during this course: urban plazas, neighborhood parks, mini-parks and vest-pocket parks, campus outdoor spaces, outdoor spaces in housing for the elderly, child-care outdoor spaces, streetscape, and hospital outdoor spaces. People Places contains a chapter-by-chapter review of the literature, illustrative case studies, and design guidelines specific to each type of space. People Places has a number of features that can be easily incorporated into the design process: The first part of the course will provide you with a background on planting design principles. In addition to that, you will study definitions and terminologies related to landscape. This will help you to comprehend the main elements of environmental planning approaches. In the second part of this course you will study the two basic approaches to design and planning people places.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Explain the relationship between landscape and architecture, particularly through the siting of a building, site planning, and elementary planting design and landscape detailing.
- (a 2) - Illustrate the contemporary profession of landscape architecture, techniques of landscape representation, and to the dynamics of professional team work with related disciplines. Computer drawing, 2D and 3D, is also taught in this module, and students present aspects of their design scheme using these methods.
- (a 3) - Address a well-defined design issue through a sophisticated design solution, within the expanded field of the urban context.
- (a 4) - Demonstrate understanding of how natural factors (landscape), socio-economic forces (planning) interact in the ecological planning process.

Through intellectual skills, students will be able to:

- (b 1) - Analyze the basic principles related to design of outdoor urban open spaces.
- (b 2) - Suggest the principles and basic of the design and planning of external Urban Spaces.
- (b 3) - Analyze the nature of the environment and its relationship to apply the basic principles of landscape design.
- (b 4) - Integrate the main architectural design principles with the landscape architecture philosophy and techniques.

Through professional and practical skills, students will be able to:

- (c 1) - Form the urban environment and the use of materials
- (c 2) - Use computer programs in the analysis of the site and Geographic Information Systems GIS.
- (c 3) - Read survey maps.
- (c 4) - Recognize local environment and its circumstances..
- (c 5) - Define the main terminologies in the field of landscape design.
- (c 6) - Demonstrate understanding of particular architecture and urban design, or landscape area/issue.
- (c 7) - Define the ecological (landscape) planning and design process.
- (c 8) - Define and analyze the basic natural and socio-economic factors in the site, and their role on the decision making of outdoor open spaces design and planning process.
- (c 9) - Demonstrate understanding of the basic knowledge of design main urban open spaces such as Parks, Gardens, Urban Plazas, Residential open spaces, campus areas, etc.

Through general and transferable skills, students will be able to:

- (d 1) - Have enough knowledge of the profession of a landscape architect, the students' needs to be accurate, hard-worker, able to cooperate in teamwork, open minded, and endeavour to learn new technologies. However, the task is not easy it needs effort and patience.
- (d 2) - Refer to relevant literature effectively. Understand that landscape architectural design reflects, records, and shapes history and plays a roll in every culture.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
Manage tasks and resources efficiently.
- (d 7) - Demonstrate efficient IT capabilities. Be able to recognize a variety of landscape architectural styles and accomplishments of contemporary, historic, and prehistoric cultures.
- (d 8) - Provide a framework within which the enterprise can start to make conscious decisions about enterprise landscape architecture and projects that implement the target enterprise architecture, and, finally, Perform visual, verbal, and written presentations.

5- Contents

- Week No. 1** Introduction to the history and theories of Landscape Architecture
- Week No. 2** Introduction to the history and theories of Landscape Architecture
- Week No. 3** Urban Open Spaces for people: Land use ,Site planning and Design Concepts
- Week No. 4** Urban plazas
- Week No. 5** Urban plazasSite layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 6** Neighborhood parks, , Mini-parks and vest-pocket parks
- Week No. 7** Neighborhood parks, , Mini-parks and vest-pocket parksSite layout ,site analysis and drawing of architectural,plans,sections and elevations.
- Week No. 8** Campus outdoor spaces
- Week No. 9** Campus outdoor spaces
- Week No.10** Campus outdoor spaces .Rendering, and finilaztion of detailed. architectural plans.
- Week No.11** Rendering, and finilaztion of detailed. architectural plans.
- Week No.12** Streetscape
- Week No.13** Streetscape
- Week No.14** Outdoor spaces in housing for the elderly
- Week No.15** Hospital and child-care outdoor spaces

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input checked="" type="checkbox"/> Other (to be mentioned):	Projects Explanation	
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Clare	M	2001	<i>People Places: Design Guidelines for Urban Open Space</i>	2	New York	Mc Graw-Hill
(2) Robert	H	2012	<i>Landscape Architecture: An Introduction</i>	4	UK	Wily B Lackwell
(3) Sleeppe	H	2001	<i>Construction for Landscape Architecture</i>	1	New York	Wily B Lackwell
(4) Niall	G	1999	<i>The Art of Landscape Detail: Fundamentals, Practices, and Case Studies</i>	1	New York	Funk ACES Library
(5) Charles	W	1998	<i>Time-Saver Standards for Landscape Architecture</i>	1	New York	McGraw-Hill
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Construction Management		
Code	801454-2		
Prerequisite Course(s)	Architectural Design 6	Code	801372-5
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input checked="" type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Dr. Ibraheem Al-Bukhari		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course is intended for undergraduate students with architectural background. It introduces the terminology of construction management, types of construction projects, and responsibilities of construction managers. A description of the contract documents, different types of construction contracts, and project delivery methods is provided as an essential part of the course. The course covers a variety of topics including planning (critical path analysis), scheduling (resource allocation and leveling), project control, and construction supervision. Computer-based applications in construction management are introduced during the course.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define the terminology of construction management
- (a 2) - Describe the construction management process
- (a 3) - Explain the role of architects in the process
- (a 4) - Illustrate the steps of planning, scheduling, bidding, and estimation
- (a 5) - Summarize the whole process from conception to operation

Through intellectual skills, students will be able to:

- (b 1) - Determine the importance of construction projects
- (b 2) - Analyze the requirements of good project planning
- (b 3) - Construct construction networks based on CPM and PERT
- (b 4) - Differentiate between different types of contracts and bidding strategies
- (b 5) - Implement the construction management tools in a case study

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Manage tasks and resources efficiently.
- (d 5) - Collaborate effectively within multidisciplinary team.

5- Contents

- Week No. 1** Building projects: importance - types - constraints and challenges)
- Week No. 2** Construction Management: initiation, roles, process, and tools
- Week No. 3** Construction contracts: types - documents and parties - contract management
- Week No. 4** Contractual relationships
- Week No. 5** Projects delivery methods
- Week No. 6** Planning: concept - steps - network diagrams
- Week No. 7** Planning: Time and Cost Estimation
- Week No. 8** Scheduling: concept and analysis
- Week No. 9** Time programming of project: critical path method (CPM)
- Week No.10** Applications on critical path method (CPM)
- Week No.11** Scheduling with limited resources
- Week No.12** Practical application on scheduling: assignment of activities, resources and materials
- Week No.13** Supervision of project
- Week No.14** Administrative procedures on construction site
- Week No.15** Computer application in construction project management

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition. Place of pub:	publisher.
(1)	Hegazy	T	2002	<i>Computer-based construction project management</i>	1st USA	Prentice Hall Inc
(2)	Tunstall	G	2000	<i>Managing the Building Design Process</i>	1st Oxford	Reed Educational and Professional Publishing Ltd
(3)	Halpin	D.W	2011	<i>Construction Management</i>	4th USA	John Wiley & Sons
(4)	Harris	F	2013	<i>Modern Construction Management</i>	7th USA	Wiley-Blackwell
(5)	Sears	S.K	2015	<i>Construction Project Management</i>	6th USA	John Wiley & Sons
b- References						
(1)	Liebing	R.W	2008	<i>Construction of Architecture: From Design to Built</i>	1st USA	John Wiley & Sons
(2)	Jackson	B.J	2010	<i>Construction Management Jump Start</i>	2nd USA	Wiley Publishing Inc
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Mega Structure Buildings		
Code	801803-2		
Prerequisite Course(s)	None	Code	None
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input checked="" type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	Dr. Said Mansi		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input type="radio"/> Compulsory	<input checked="" type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Definition of giant buildings and its history. Build knowledge about process of construction and construction equipment and accompanied mechanisms, effect of natural power (wind & earthquakes) on design of skyscrapers.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Record a strong basis for the student's knowledge of construction of Mega Projects , its Development until now.
- (a 2) - Explain the history of giant Buildings
- (a 3) - Give examples of modern techniques and materials used in the construction of the giant buildingsE
- (a 4) - Define Safety in design skyscrapers

Through intellectual skills, students will be able to:

- (b 1) - Construct safe giant buildings
- (b 2) - Apply won knowldege in design projects
- (b 3) - Determine safety requiremnts should be applied
- (b 4) - Criticize existing giant buildings
- (b 5) - Create new design forms

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Carry out specialized designs.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 7) - Display imagination and creativity.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.
- (c 9) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient IT capabilities.
- (d 8) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Introduction about mega construction
- Week No. 2** History of Skyscrapers in Europe
- Week No. 3** World's highest skyscrapers
- Week No. 4** Steel and Skyscrapers
- Week No. 5** Petronas ; the twin giants in Bangkok-Thailand
- Week No. 6** Burj Khalifa in Dubai
- Week No. 7** Design criteria for Skyscrapers
- Week No. 8** Documentary films, student presentations and general Discussion
- Week No. 9** Research
- Week No.10** Mega construction, stadiums and history
- Week No.11** World's famous stadiums
- Week No.12** Bird's nest stadium in China
- Week No.13** King Fahd stadium in Ryiad- KSA
- Week No.14** Design criteria of stadiums
- Week No.15** Documentary films, Student Presentations and general discussion

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input checked="" type="checkbox"/> Other (to be mentioned): Drawing Tools		

8- Reading List

a- Text Books				
SURNAME,	Initials.	(pub. year)	Book title.	Edition. Place of pub: publisher.
(1) Schierle	G.	2008	<i>Architectural Structures.</i>	1. University Readers
(2) Frick / Knoell		2009	<i>Baukonstruktionslehre,</i>	1. Vieweg+Teubner Verlag
(3) Neufert	E.	2012	<i>Neufert</i>	4. Wiley-Blackwell
(4) G.W.OWENS & P.R. KNOWLES,		2012	<i>Steel Designers'</i>	7. Wiley-Blackwell
(5) Gottman,	J.	(1966	<i>."Why the Skyscraper?"</i>	2. American Geographical Society
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1) Internet				
(2)				
(3)				



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Modern Technologies in construction Buildings		
Code	801802-2		
Prerequisite Course(s)	None	Code	None
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input checked="" type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	Dr. Ali Elmansoury		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input type="radio"/> Compulsory	<input checked="" type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Definition of the different construction systems (Long Span Structure Systems: Trusses and Frames, Space trusses, Shells and Cables). Definition of the methods and systems of construction and building materials. Construction process of modern buildings (Curtain Walls- Light Walls (Gypsum Board) - Raised Floors -... etc.). New possibilities to solve the problem of the car Parking in crowded cities.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define modern technologies in building industry
- (a 2) - Define new construction materials
- (a 3) - Illustrate modern technique to solve existing realistic problems (Car parking)

Through intellectual skills, students will be able to:

- (b 1) - Analyze different construction systems
- (b 2) - Analyze methods and systems of construction and building materials
- (b 3) - Evaluate construction process of modern buildings

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Carry out specialized designs.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 7) - Display imagination and creativity.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.
- (c 9) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient IT capabilities.
- (d 8) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Introduction
- Week No. 2** Structural Systems
- Week No. 3** Trusses & Frames
- Week No. 4** Trusses & Frames
- Week No. 5** Space trusses
- Week No. 6** Shells
- Week No. 7** Suspended Cables
- Week No. 8** Explaining Videos , Students Presentation & Discussion
- Week No. 9** Research
- Week No.10** Curtain walls (Show room)
- Week No.11** Types and uses of gypsuum board as light walls
- Week No.12** Details of gypsuum boards (Show room)
- Week No.13** Raised floors (Show room)
- Week No.14** Parking Places and new Technologies
- Week No.15** Explaining Videos , Students Presentation & Discussion

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned): Show room
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
	SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1)	Henry J. Cowan., Forrest Wilson	1981	<i>Structural Systems</i>	1.	Van Nostrand Reinhold Company
(2)	Ching	F. 2011	<i>Building Construction Illustrated</i>	5.	John Wiley & Sons
(3)	Michael	J. 2005	<i>Curtain Walls</i>	1.	Birkhäuser Architecture
(4)					
(5)					
b- References					
(1)					
(2)					
(3)					
(4)					
(5)					
c- Others					
(1)	Knauf- Konstruktionshefte, Germany				
(2)	Woehr Parking Systems, Stuttgart, Germany				
(3)	Product Kawneer Company, Curtain walls				



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Outdoor Space Design		
Code	801334-2		
Prerequisite Course(s)	Architectural Design 5	Code	801371-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input checked="" type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Dr. Talal Hammadi		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

Outdoor space is an important component of any urban fabric; it is the complementary part of the built up area containing various human activities such as social, recreational and economical activities. It also reflects the overall image of the city. The main objective of this course is to study the Outdoor spaces (their forms and elements) inside the city. The course is based on the historical, analytical and descriptive study, in addition to research tools such as observation and field survey.

4- Intended Learning Outcomes (ILOs)

a- Contribution of Learning Outcomes to Programme Outcomes			
<i>The graduate must be able to:</i>	Level of Contribution (<i>Lowest 1, Highest 3</i>)		
Have the ability to think creatively and to control and integrate the activities of other parties involved in the planning.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Have the ability to collect information, to define problems, to apply analysis, to judge critically and to formulate strategies for action.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have understanding of the social context of a construction project.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Can identify and define functional requirements for different sectors of environment.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Can apply their knowledge on natural systems and built environment.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have an awareness of the importance of technical infrastructure for design and implementation and are alert to the planning and control of construction cost.	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Have an understanding of design techniques and design processes as well as knowledge in analysis and interpretation of framework.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have the ability to work in teams and communicate ideas by means of speech, text, drawings, models and statistics.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have an understanding of evaluation systems, which utilize manual and/ or electronic means for the diagnosis of built environment.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Demonstrate understanding of history of open spaces.
- (a 2) - Demonstrate understanding of open spaces characteristics.
- (a 3) - Demonstrate understanding of design principles of urban open spaces.

Through intellectual skills, students will be able to:

- (b 1) - Analyze and evaluate urban open spaces.

Through professional and practical skills, students will be able to:

- (c 1) - Prepare and present reports.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.

T Through general and transferable skills, students will be able to:

- (d 1) - Collaborate effectively within multidisciplinary team.
- (d 2) - Search for information and adopt life-long self learning.
- (d 3) - Refer to relevant literature effectively.
- (d 4) - Demonstrate efficient IT capabilities.

5- Contents

Week No. 1	Introduction to the Course Problem Definition.
Week No. 2	History of Open Spaces: Open space in ancient Egyptian, Greek, Roman civilization.
Week No. 3	History of Open Spaces: Open space in Medieval and Renaissance periods, and Islamic era.
Week No. 4	Classification and Components of Urban Open Spaces (Physical Components and Human Activities).
Week No. 5	Properties of Urban Open Spaces: Visual properties of Open Spaces (1): Proportion, Enclosure and Scale.
Week No. 6	Visual properties of Open Spaces (2): Materials, Colour, Texture, Pattern, Light, etc .
Week No. 7	The Influences of Hearing on Formation and Design of Open Spaces
Week No. 8	The Influences of Tactile and Smell on Formation and Design of Open Spaces
Week No. 9	Mental Perception of Open Spaces.
Week No.10	Design Principles of Open Spaces: Permeability and Variety.
Week No.11	Design Principles of Open Spaces: Legibility and Robustness.
Week No.12	Design Principles of Open Spaces: Visual Appropriateness.
Week No.13	Design Principles of Open Spaces: Richness and Personalization.
Week No.14	Analysis of example (1)
Week No.15	Analysis of example (2)

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1) CHING,	D.K (2012)	<i>Architecture: Form, Space & Order.</i>	3rd. New Jersey:	John Wiley & Sons.
(2) LYNCK,	K. (1960)	<i>The Image of the City.</i>	USA:	The MIT Press
(3) BENTLEY,	L. (2008)	<i>Responsive environments : a manual for designers.</i>	3rd. London:	Routledge.
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b- References				
(1) FLETCHER,	B. (1996)	<i>A History of Architecture</i>	London:	Architectural Press.
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c- Others				
.	None			
.				
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Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Properties of Materials		
Code	801326-2		
Prerequisite Course(s)	Building and Construction 2	Code	801222-2
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input checked="" type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy	Prof. Ehab Rached	
Lecturer(s)	Dr. Said Mansi		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings:

Studying building and construction materials, physical properties, chemical and mechanical properties of building materials, strength of materials including properties and performance under dynamic loads. focusing on properties of some construction materials such as steel, concrete, wood, insulating materials, interior finishing materials and exterior finishing materials. More concerns on materials related to building construction with lab specification data.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define physical properties of construction materials.
- (a 2) - Define chemical and mechanical properties of construction materials.
- (a 3) - Explain strength of materials including properties and performance under dynamic loads.

Through intellectual skills, students will be able to:

- (b 1) - Analyze physical properties of construction materials.
- (b 2) - Analyze chemical and mechanical properties of construction materials.
- (b 3) - Calculate strength of materials including properties and performance under dynamic loads.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Carry out specialized designs.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 7) - Display imagination and creativity.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.
- (c 9) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient IT capabilities.
- (d 8) - Manage tasks and resources efficiently.
- (d 9) - Communicate effectively.

5- Contents

- Week No. 1** Physical , chemical and mechanical properties of building materials in construction.
- Week No. 2** Continued : Physical , chemical and mechanical properties of building materials in construction.
- Week No. 3** Cement : properties and uses.
- Week No. 4** Continued : Cement : properties and uses.
- Week No. 5** Concrete types : uses and methods of mixing
- Week No. 6** Continued : Concrete types : uses and methods of mixing
- Week No. 7** The importance of the laboratory and experiments on the properties of concrete strength
- Week No. 8** Properties, types and uses of iron, copper, zinc and aluminum
- Week No. 9** Properties ,types and uses of sand , gravel , lime , gypsum ,alrkham and granite
- Week No.10** Properties ,types and uses of glass , ceramic and wood.
- Week No.11** Continued: Properties , types and uses of glass ,ceramic and wood.
- Week No.12** Polymers: properties and uses . Discussing examples and uses of poly vinyl chloride , PVC , polyvinyl ester , polystearin , polyurethane , silicon and poly carbonate).
- Week No.13** Continued Polymers: properties and uses . Discussing examples and uses of poly vinyl chloride , PVC , polyvinyl ester , polystearin , polyurethane , silicon and poly carbonate).
- Week No.14** Paints: basics, types and applications. Including basic components , additions , binders and resins
- Week No.15** Continued : Paints: basics, types and applications. Including basic components , additions , binders and resins

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input checked="" type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1) Shehatd A.,Ryad M.	2009	<i>Properties of Materials</i>	Cairo	Dar alfaJr Publishing
(2) Steve H.	2004	<i>Physics For Dummies</i>	USA.	John Wiley & Sons
(3) Karl F.	2005.	<i>Basic Physics</i>	USA.	John Wiley & Sons
(4)				
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1)				
(2)				
(3)				



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Structure in Architecture-1		
Code	803227-2		
Prerequisite Course(s)	None	Code	None
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input checked="" type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Dr. Said Mansi		
Lecturer(s)	Department of civil Engineering Dr. Ayman Gamal		
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings:

Studying Vector analysis of force, Force system in 2D and 3D, moments and couples, equivalent for system, equilibrium in 2D, analysis of structures, centroids and composite bodies, distributed force system, friction and area moment of inertia.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define the forces
- (a 2) - Give examples of vector summation
- (a 3) - Illustrate the results and couples

Through intellectual skills, students will be able to:

- (b 1) - Calculate the resultants and forces
- (b 2) - Determine the centre of gravity
- (b 3) - Analyze the body equilibrium
- (b 4) - Construct rigid body diagramme

Through professional and practical skills, students will be able to:

- (c 1) - Generate, develop and evaluate innovative solutions for various problems.
- (c 2) - Use a wide range of analytical and technical tools.
- (c 3) - Prepare and present assignment
- (c 4) - Work in a multi-professional working environment..

Through general and transferable skills, students will be able to:

- (d 1) - Communicate effectively.
- (d 2) - Work in stressful environment and within constraints.
- (d 3) - Collaborate effectively within multidisciplinary team.
- (d 4) - Manage tasks and resources efficiently.

5- Contents

Week No. 1 Introduction

Week No. 2 Vector analysis of force

Week No. 3 Force systems in 2D and 3D

Week No. 4 Equivalent for system

Week No. 5 Equilibrium in 2D

Week No. 6 Analysis of structures

Week No. 7 Beams

Week No. 8 Frames

Week No. 9 Exercise

Week No.10 Trusses

Week No.11 Centroids and composite bodies

Week No.12 Distributed force system

Week No.13 Friction

Week No.14 Centre of Gravity

Week No.15 Area moment of inertia

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials.	(pub. year)	Book title.	Edition. Place of pub: publisher.
(1) Hibler, R.	C.	2013	<i>Engineering Mechanics : Statics</i>	9th Prentice-Hall
(2)				
(3)				
(4)				
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1)				
(2)				
(3)				



Umm Al-Qura University
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Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Structure in Architecture-2		
Code	803327-2		
Prerequisite Course(s)	Structure in Architecture 1	Code	803227-2
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input checked="" type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Dr. Said Mansi		
Lecturer(s)	Department of civil Engineering Dr. Ayman Gamal		
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings:

Introduction to concrete-components-properties-processing steps, reinforcing steel-kinds-properties, reinforced concrete elements for construction facilities concrete, Cal- loads calculation method, theories stress-design and operating method maximum resistance method, design of seamless tiles, design of beams, design of columns and types of foundations design in isolated footings.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define reinforced concrete
- (a 2) - Describe the types of loads
- (a 3) - Explain design methods
- (a 4) - Give examples of different structural elements
- (a 5) - Draw reinforcing details

Through intellectual skills, students will be able to:

- (b 1) - Analyze type of forces
- (b 2) - Determine internal forces
- (b 3) - Calculate the max. stresses
- (b 4) - Design the critical sections

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of different fields to solve problems.
- (c 2) - Use a wide range of analytical and technical tools.
- (c 3) - Prepare and present drawings.
- (c 4) - Carry out specialized designs.
- (c 5) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 6) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Refer to relevant literature effectively.
- (d 2) - Communicate effectively.
- (d 3) - Work in stressful environment and within constraints.
- (d 4) - Collaborate effectively within multidisciplinary team.

5- Contents

- Week No. 1 Introduction
- Week No. 2 Concrete constituents
- Week No. 3 Properties of concrete
- Week No. 4 Steel reinforcement
- Week No. 5 Types and properties of Steel
- Week No. 6 Reinforced Concrete
- Week No. 7 Loads
- Week No. 8 Methods of design
- Week No. 9 exercise
- Week No.10 Analysis of rectangular section under bending
- Week No.11 Design of one-way solid slab
- Week No.12 Design of Beams
- Week No.13 Design of Columns
- Week No.14 Types of foundations
- Week No.15 Design of isolated Footings

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
	SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1)	McCormac J. C. and Nelson J. K.,	2010	"Design of Reinforced Concrete",	8th	John Wily and son Inc,
(2)					
(3)					
(4)					
(5)					
b- References					
(1)					
(2)					
(3)					
(4)					
(5)					
c- Others					
(1)					
(2)					
(3)					



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Structure in Architecture 3		
Code	803427-2		
Prerequisite Course(s)	Structurein Architecture 2	Code	803327-2
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input checked="" type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Dr. Said Mansi		
Lecturer(s)	Department of civil Engineering Dr. Ayman Gamal		
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	30	Hour(s) /Semester		
	Total	60	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings:

Studying loads on structures, engineering structure ,design procedure, dead load, life load, wind load, impact, factor of safety and load factor, codes and specifications, design of tension members, types of Tension members, the Net section, distribution of stresses on Net sections, gusset plates, design of compression members, elastic buckling of columns, design of columns, columns Basis, design of beams, bending behaviour of beams , beam cross sections, allowable bending stress, design of simple bending, connections, Bolted and revited connection and welded Connections

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Give examples of types of Steel Structures
- (a 2) - Explain Statical Systems
- (a 3) - Draw details

Through intellectual skills, students will be able to:

- (b 1) - Analyze of Loads and internal Forces
- (b 2) - Calculate the sections
- (b 3) - Determine the max. Deflection for Beams

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Use a wide range of analytical and technical tools.
- (c 3) - Prepare and present assignments.
- (c 4) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Communicate effectively.
- (d 2) - Work in stressful environment and within constraints.
- (d 3) - Collaborate effectively within multidisciplinary team.
- (d 4) - Lead and motivate individuals.
- (d 5) - Demonstrate efficient IT capabilities.

5- Contents

- Week No. 1** Introduction
- Week No. 2** Loads on structure , Dead Load , Life Load , Wind load , Impact and Factor of safety
- Week No. 3** Engineering structure , Design Procedure and Codes of specifications
- Week No. 4** Design of tension members
- Week No. 5** Design and Types of tension members
- Week No. 6** The Net section : Distribution of Stresses on Net sections -Gusset Plates
- Week No. 7** Design of Compression Members and Elastic Buckling of Columns
- Week No. 8** Design of Columns and Columns Basis
- Week No. 9** Exercise
- Week No.10** Design of Beams : Binding Behaviour of Beams
- Week No.11** Beam Cross Sections : Allowable Bending stress
- Week No.12** Design for Simple Bending
- Week No.13** Connections
- Week No.14** Bolted and Riveted connections
- Week No.15** Welded connections

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1)	McCormac J. C.	2012	Structural Steel Design",	5th John Wily and Son I
(2)				
(3)				
(4)				
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1)				
(2)				
(3)				



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Summer Training-1		
Code	801256-2		
Prerequisite Course(s)	Architectural Design 3	Code	801271-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input checked="" type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	DIA lecturers		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	16	Hour(s) /Semester		
	Self-study	48	Hour(s) /Semester		
	Total	64	Hour(s) /Semester		
Credit Points according to ECTS	2	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course aims to configure a strong foundation for the student's specific knowledge of traditional and historic areas, so as to include a number of secondary objectives.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Demonstrate understanding of traditional and historic areas.
- (a 2) - Draw an existing historic building.
- (a 3) -
- (a 4) -
- (a 5) -

Through intellectual skills, students will be able to:

- (b 1) - Analyze principles of islamic architecture.
- (b 2) - Suggest solutions for some existing problems in the study area.
- (b 3) - Compare between various suggestions and select the most appropriate one.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Carry out specialized designs.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.
- (c 7) - Display imagination and creativity.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.
- (c 9) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Have the ability to think creatively and to control and integrate the activities of other parties involved in the planning
- (d 2) - Can apply their knowledge of historical and cultural references in the field of international architecture. .
- (d 3) - Can apply their knowledge of bearing structure, materials, supply and disposal
- (d 4) - Have an understanding of design techniques and design processes as well as knowledge in analysis and interpretation of framework
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient IT capabilities.
- (d 8) - Manage tasks and resources efficiently.
- (d 9) - Use computational tools & software packages pertaining to the discipline & develop required computer programs.

5- Contents

Week No. 1 Introduction

Week No. 2 Principles of Islamic architecture

Week No. 3 Field study

Week No. 4 Field study

Week No. 5 Field study

Week No. 6 Studio work

Week No. 7 Studio work

Week No. 8 Presentation

Week No. 9 -----

Week No.10 -----

Week No.11 -----

Week No.12 -----

Week No.13 -----

Week No.14 -----

Week No.15 -----

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Activities	50%	Final Exam	50%
Forms of Examination	<input type="checkbox"/> Written Examination		<input type="checkbox"/> Drawing Examination	
	<input type="checkbox"/> Assignments		<input checked="" type="checkbox"/> Research and Discussions	
	<input type="checkbox"/> Oral Examination		<input checked="" type="checkbox"/> Other (to be mentioned): Report	
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room		<input type="checkbox"/> Design Studio	
	<input type="checkbox"/> Computer Lab.		<input type="checkbox"/> Laboratory	
	<input type="checkbox"/> Specific Equipment		<input type="checkbox"/> Other (to be mentioned):	

8- Reading List

a- Text Books			
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub: publisher.
(1)			
(2)			
(3)			
(4)			
(5)			
b- References			
(1)			
(2)			
(3)			
(4)			
(5)			
c- Others			
(1)	Lecture handout		
(2)			
(3)			



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Summer Training 2		
Code	801352-2		
Prerequisite Course(s)	Architectural Design 5	Code	801371-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input checked="" type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	DIA lectures		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	0	Hour(s) /Semester		
	Self-study	320	Hour(s) /Semester		
	Total	320	Hour(s) /Semester		
Credit Points according to ECTS	12	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The main goal of this course is to configure a strong foundation for the student's knowledge of the different stages of professional work through the summer training in an architectural firm. The supervisor submit a report to the department of the student 's performance during the training period.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

Through intellectual skills, students will be able to:

- (b 1) - Design an existing architectural project, prepare working drawings and/or supervise the various stages of implementation.
- (b 2) - Solve various actual architectural problems

Through professional and practical skills, students will be able to:

- (c 1) - Exercise their professional work
- (c 2) - Master the drawings of buildings preparation
- (c 3) - Exercise supervision of the various stages of implementation of the buildings under the supervision of engineers by the engineering office .
- (c 4) - Take advantage of what was learned in previous courses of understanding of the methods of design.

Through general and transferable skills, students will be able to:

- (d 1) - Follow-up the practice of professional work.
- (d 2) - Use the latest publications, books, periodicals and journals to learn about the practice of professional work.

5- Contents

Week No. 1 Practice in an architectural firm.

Week No. 2 Practice in an architectural firm.

Week No. 3 Practice in an architectural firm.

Week No. 4 Practice in an architectural firm.

Week No. 5 Practice in an architectural firm.

Week No. 6 Practice in an architectural firm.

Week No. 7 Practice in an architectural firm.

Week No. 8 Practice in an architectural firm.

Week No. 9 -----

Week No.10 -----

Week No.11 -----

Week No.12 -----

Week No.13 -----

Week No.14 -----

Week No.15 -----

6- Teaching and Learning Methods

Type of teaching	<input type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned): Practical Training
Media Employed	<input type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned): None

7- Student Assessment

Procedures used and Weight of Assessment	---	---%	---	---
	---	---%	---	---
	---	---%	Supervisor Evaluation	100%
Forms of Examination	<input type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination	Report of the Bureau supervisor for student performance during the training period	
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned): None		

8- Reading List

a- Text Books			
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub: publisher.
(1) None			
(2)			
(3)			
(4)			
(5)			
b- References			
(1) None			
(2)			
(3)			
(4)			
(5)			
c- Others			
(1) None			
(2)			
(3)			



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Surveying		
Code	803312-2		
Prerequisite Course(s)	Architectural Design 3	Code	801271-5
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input checked="" type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Dr. Said Mansi		
Lecturer(s)	Dr. Khalid El-Ashmawy		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	60	Hour(s) /Semester		
	Total	90	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Studying distance measurements, leveling, profile and cross section leveling , grid leveling, contouring, horizontal and vertical angles measurements by Theodolite, direction of lines and area and volume calculation using cross sections, grids and contours methods.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Classify the methods of measuring distances
- (a 2) - Explain the use of the level instruments in leveling types and applications.
- (a 3) - Define the methods to calculate areas and earthwork volume using different techniques
- (a 4) - Define the measurements of directions and angles

Through intellectual skills, students will be able to:

- (b 1) - Solve the problems of distance, area, levelling measurements
- (b 2) - Compare between the different methods of area calculation and distance measurements
- (b 3) - Determine the vertical and horizontal angles and directions between points
- (b 4) - Calculate the area and earthwork volumes

Through professional and practical skills, students will be able to:

- (c 1) - Use a wide range of analytical and technical tools.
- (c 2) - Prepare and present assignments
- (c 3) - Carry out specialized field work
- (c 4) - Work in a multi-professional working environment.

Through general and transferable skills, students will be able to:

- (d 1) - Refer to relevant literature effectively.
- (d 2) - Communicate effectively.
- (d 3) - Work in stressful environment and within constraints.
- (d 4) - Collaborate effectively within multidisciplinary team.
- (d 5) - Lead and motivate individuals.

5- Contents

Week No. 1 Introduction

Week No. 2 Distance measurement by tape

Week No. 3 Distance measurement by DISTO

Week No. 4 Levelling

Week No. 5 Grid levelling

Week No. 6 Profiling

Week No. 7 Cross sectioning

Week No. 8 Exercises

Week No. 9 Area calculation

Week No.10 Earthwork computation from gridding

Week No.11 Earthwork computation from sectioning

Week No.12 Earthwork computation from contouring

Week No.13 Horizontal angle measurement

Week No.14 Vertical angle measurement

Week No.15 Direction measurement using compass

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input checked="" type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1) F. Kavanagh	B. 2009.	"Surveying, Principles and Applications"	8.	Prentice Hall
(2) Wolf, P.	R. 2006	"Elementary Surveying"	11.	Prentice Hall
(3)				
(4)				
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1)				
(2)				
(3)				



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Sustainable and Green Architecture		
Code	801804-2		
Prerequisite Course(s)	None	Code	None
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input checked="" type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	Prof. Ehab Rached		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input type="radio"/> Compulsory	<input checked="" type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Taking advantage of the values and principles of green architecture to achieve sustainability concepts through identifying the principles, goals, dimensions of sustainable development and studying methods of environmental assessment for architectural projects. Study of standards and strategies of planning and environmental design, knowledge of the different Environmental Assessment systems for Urban Projects and raising the efficiency of energy use at the urban and architectural level (LEED system-BREEAM system). The course emphasizes on how to use sources of new energy and how to integrate them with buildings to rationalize energy consumption to achieve sustainability criteria. It also includes models of local and international architectural projects that achieve sustainability and green architecture concepts.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - List the advantage of the values and principles of green architecture to achieve sustainability concepts, through identifying the principles, goals, and dimensions of sustainable development.
- (a 2) - Explain the methods of environmental assessment for architectural projects.
- (a 3) - List standards and strategies of planning and environmental design.
- (a 4) - Define and knowledge of the different Environmental Assessment systems for Urban Projects, and also raise the efficiency of energy use at the urban and architectural level (LEED system-BREEAM system).
- (a 5) - Explain how to use Sources of new energy and how to integrate them with the building to rationalize energy consumption in buildings to achieve sustainability criteria.
With studying selected models of local and international architectural projects that achieve sustainability and green architecture concepts.

Through intellectual skills, students will be able to:

- (b 1) - Determine principles of green architecture to achieve sustainability concepts
- (b 2) - Apply standards and strategies of planning and environmental design in architecture project
- (b 3) - Compare between methods of environmental assessment for architectural projects.
- (b 4) - Suggest how to use Sources of new energy and how to integrate them with the building to rationalize energy consumption in buildings to achieve sustainability criteria. With studying selected models of local and international architectural projects that achieve sustainability and green architecture concepts.
- (b 5) - Analyze selected models of local and international architectural projects that achieve sustainability and green architecture concepts.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Carry out specialized designs.
- (c 6) - Display imagination and creativity.
- (c 8) - Appreciate the neatness and aesthetics in design and approach.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient IT capabilities.
- (d 8) - Manage tasks and resources efficiently.

5- Contents

- Week No. 1** Preface to achieve sustainability concepts by recognizing the principles, dimensions and objectives of sustainable development.
- Week No. 2** Knowing the principles, standards and concepts of green architecture.
- Week No. 3** General basis to fully understand the green architecture concepts
- Week No. 4** Methods of maintaining and dealing with natural resources.
- Week No. 5** Rationalizing the use of traditional energy sources and the use of renewable energy sources in addition to Water and waste recycling systems
- Week No. 6** Water and waste recycling systems
- Week No. 7** Promote field visit to sustainable building site or to laboratory experiment
- Week No. 8** Environmental planning to achieving green architecture concepts.
- Week No. 9** Environmental design down to achieving sustainability
- Week No.10** Environmental design down to achieving sustainability
- Week No.11** Study of environmental assessment methods for architectural projects..
- Week No.12** Promote field visit to sustainable building site or to laboratory experiment
- Week No.13** Identifying systems to global assessing of the building efficiency performance.(LEED system-BREEAM system)
- Week No.14** studying selected models of local and international architectural projects that achieve sustainability and green architecture concepts.
- Week No.15** Presentation of research

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input checked="" type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Givoni	bar	1998	<i>Climate Considerations in Building and Urban Design</i>	1st	New York	John Wiley & sons
(2) Thomas	Ran	2006	<i>Environmental Design -An Introduction for Architects and Engineers</i>	3rd	New York	Taylor and francis
(3) Olgay	Vic	1992	<i>Design with climate :Bioclimatic Approach to Architectural Regionalism</i>	10	New York	Princeton University
(4) Chiras	Dan	2011	<i>The Home Owner s Guide to Renewable Energy :Achieving Energy Independence Through Solar , Wind ,Biomass,and Hydropower</i>	2nd	Canda	New society Publisher
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
 College of Engineering and Islamic Architecture
 Department of Islamic Architecture
 Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Theories of Architecture 1		
Code	801117-2		
Prerequisite Course(s)	History of Architecture	Code	801115-2
Recommended Skills	None		
Semester Level <small>(in which the module is taught)</small>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input checked="" type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Dr. Abdulkareem Hamidaddin		
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester
	Self-study	45	Hour(s) /Semester
	Total	75	Hour(s) /Semester
Credit Points according to ECTS	3	point(s)	Credit Hours 2 Hour(s)

3- Module Summary

The course comprises the followings: Architectural concepts and terminology (scale and human scale, proportion of the human and the golden section), module and the modulator, the terms of architecture (utility, durability, beauty and economy), aesthetics for architecture, principles of architectural composition (Unity, variety, percentages, measurement, character, expression ...Etc.), also analysis of the buildings to its elements (utility, communication, circulation, service, protection, ventilation, construction and beauty), as well as the factors that affect architectural design (materialism and physical, humanitarian and civil, scientific, economic, industrial and technological, ...Etc.), design considerations for buildings (residential, religious, administrative, sporty, cultural, Entertainment, service, ...Etc.), in addition to the most important pioneers of twentieth-century architecture and some of their distinctive work, such as: (Frank Lloyd Wright, Le Corbusier, Walter Gropius, Mies van der Rohe, and Oscar Niemeyer).

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define with some definitions, concepts and architectural terms.
- (a 2) - Explain the conditions required in the architecture.
- (a 3) - Summarize the aesthetics of architecture and (substantive theories, and theories of subjectivity) in architectural design.

Through intellectual skills, students will be able to:

- (b 1) - Differentiate between the principles of architectural composition and factors affecting them.
- (b 2) - Analyze the buildings to its elements.
- (b 3) - Analyze design considerations for various types of buildings.
- (b 4) - Compare between some of the most important pioneers of twentieth-century architecture and some of their distinctive work.

Through professional and practical skills, students will be able to:

- (c 1) - Prepare of research reports by students of architectural topics which have been studied within the curriculum
- (c 2) - Collect information from different resources to support logical thinking and opinions in architectural discussion
- (c 3) - Generate, develop and evaluate innovative architecture solutions for various environmental problems.
- (c 4) - Prepare, develop and present drawings using an appropriate range of visual, verbal and written media.
- (c 5) - Use a wide range of analytical and technical tools through some of the architectural projects and pioneers works.
- (c 6) - Integrate knowledge of different fields to solve problems throughout some of the architectural projects and pioneers works

Through general and transferable skills, students will be able to:

- (d 1) - Present research in seminars or group meetings, discuss findings, defined their ideas, and communicate effectively in writing, verbally and through drawings and models.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Work in stressful environment and within constraints and Communicate effectively.
- (d 4) - Adopt an open-minded approach in the appraisal of design issues, requirements and opportunities
- (d 5) - Search for information and adopt life-long self learning and Lead and motivate individuals.
- (d 6) - Listen and critically respond to the views of others.
- (d 7) - Transfer techniques and solutions from one field of architecture to another.
- (d 8) - Work coherently and successfully as a part of a team in projects, assignments, etc.
- (d 9) - Independently seek knowledge, set aims, targets, objectives and plan to meet them with a deadline (time management).

5- Contents

- Week No. 1** Introduction of the curriculum, and beginning of the city, and construction.
- Week No. 2** Definitions and architectural terms.
- Week No. 3** Architectural concepts and terminology.
- Week No. 4** Scales and architectural proportions.
- Week No. 5** Module and Modulo.
- Week No. 6** The aesthetics of architecture and (substantive theories, and theories of subjectivity) in architectural design.
- Week No. 7** Design Principles and architectural composition.
- Week No. 8** Analysis of the buildings to its elements.
- Week No. 9** The factors that affect on architectural design.
- Week No.10** The different stages of the design process.
- Week No.11** Design considerations for buildings (residential, religious).
- Week No.12** Design considerations for buildings (administrative, sports).
- Week No.13** Design considerations for buildings (cultural, entertainment, service, ...Etc).
- Week No.14** The most important pioneers of twentieth-century architecture and some of their distinctive work, such as: Frank Lloyd Wright and Le Corbusier.
- Week No.15** The most important pioneers of twentieth-century architecture and some of their distinctive work, such as: Walter Gropius, Mies van der Rohe, and Oscar Niemeyer.

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input checked="" type="checkbox"/> Other (to be mentioned):	Quizzes	
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1)	Almonajed	Ju.	1988	<i>Theories of Architecture</i>	1st	A, Syria Aleppo University
(2)	Shirzad	S.I	1999	<i>Modern architectural movements - global style in architecture,</i>	1st	B, Lebanon The Arab Association for Studies and Publishing
(3)	Ross	A.	2008	<i>Principles of Design</i>	1st	London, UK John Wiley & Sons
b- References						
(1)	JENCKS	CH.	1982	<i>Current Architecture</i>	1st	London, UK Academy Editions
(2)	JENCKS	CH.	2001	<i>Architecture 2000</i>	2nd	London, UK John Wiley & Sons
c- Others						
(1)	Hanafi, E., 2012, Architectural design theories, Islamic architecture Department-Umm Al-Qura University, Mecca, KSA, library map.					



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Theories of Architecture 2		
Code	801316-2		
Prerequisite Course(s)	Theories of Architecture 1	Code	801117-2
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input checked="" type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Dr. Abdulkareem Hamidaddin		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Renaissance beginning from (Bramante) and ends with (Michelangelo), The Baroque and Rococo periods. The industrial revolution and its architectural manifestations, battle of the styles and the 19th century, also modern art and generation of pioneers in the beginning of the twentieth century. In addition to the modern architecture of some architectural schools such as: Bauhaus – Chicago – functionalism – organic, etc.). Finally, the first and second generation of the pioneers.

4- Intended Learning Outcomes (ILOs)

a- Contribution of Learning Outcomes to Programme Outcomes			
<i>The graduate must be able to:</i>	Level of Contribution (<i>Lowest 1, Highest 3</i>)		
Can apply their knowledge of historical and cultural references in the field of international architecture.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have developed an awareness of the connections between architecture and philosophy, and political trends and cultural movement of other creative disciplines.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have knowledge of architecture-related content of philosophy, political science and ethics.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have an understanding of design techniques and design processes as well as knowledge in analysis and interpretation of framework.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have information on the history of design and architecture criticism.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Have the ability to work in teams and communicate ideas by means of speech, text, drawings, models and statistics.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define architectural theories through a review of the historical era of the Renaissance with three architectural stages.
- (a 2) - Explain Baroque and Rokoko periods to the industrial revolution and its architectural manifestations, battle of the styles.
- (a 3) - Summarize the development of theory of architecture from the 18th century up to the twentieth century.

Through intellectual skills, students will be able to:

- (b 1) - Differentiate between architectural trends and movements, philosophies directions and theories comparatively.
- (b 2) - Analyze influencing architectural factors and the surrounding environment and take them into consideration.
- (b 3) - Analyze the society, its symptoms, needs, available technologies and their reflection on the architectural design structural components and formation.
- (b 4) - Integrate architectural design with the various architectural trends and historical theories

Through professional and practical skills, students will be able to:

- (c 1) - Prepare architectural reports integrating social economical, structural, constructional, environmental dimensions.
- (c 2) - Collect information from different resources to support logical thinking and opinions in architectural discussion
- (c 3) - Assess an architectural work and recognize its weaknesses and strengths based on student study of the different historical periods.
- (c 4) - Generate, develop and evaluate innovative architecture solutions for various environmental problems.
- (c 5) - Use a wide range of analytical and technical tools through pioneers works.
- (c 6) - Prepare, develop and present drawings using an appropriate range of visual, verbal and written media.
- (c 7) - Integrate knowledge of different fields to solve problems throughout the pioneers works .

Through general and transferable skills, students will be able to:

- (d 1) - Present research in seminars or group meetings, discuss findings, defined their ideas, and communicate effectively in writing, verbally and through drawings and models.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Work in stressful environment and within constraints and Communicate effectively.
- (d 4) - Adopt an open-minded approach in the appraisal of design issues, requirements and opportunities
- (d 5) - Search for information and adopt life-long self learning and Lead and motivate individuals.
- (d 6) - Listen and critically respond to the views of others.
- (d 7) - Transfer techniques and solutions from one field of architecture to another.
- (d 8) - Work coherently and successfully as a part of a team in projects, assignments, etc.
- (d 9) - Independently seek knowledge, set aims, targets, objectives and plan to meet them with a deadline (time management).

5- Contents

- Week No. 1** Definition and content, and overview.
- Week No. 2** The Renaissance (in Italy): The architecture in renaissance .
- Week No. 3** The Renaissance (in Italy): Architecture in the period of regeneration.
- Week No. 4** The Renaissance (in Italy): The Baroque and Rococo periods.
- Week No. 5** 18th century (the era of thought and the industrial revolution): New building materials (iron, glass, reinforced concrete, etc.), and construction engineers works with new materials.
- Week No. 6** 18th century (the era of thought and the industrial revolution):The works of architects with new materials, and the new materials and its effect on architecture (positively and negatively).
- Week No. 7** 19th century (trends/approach-architecture):Theories Romantique (Romanticism).
- Week No. 8** 19th century (trends/approach - architecture):The arts and Crafts movement.
- Week No. 9** 19th century (trends/approach - architecture):The Rational School.
- Week No.10** 19th century (trends/approach - architecture):The Art Nouveau School.
- Week No.11** 19th century (trends/approach - architecture):The trend towards simplicity.
- Week No.12** The first Generation pioneers, from the late (19), until the early 20th century (20):
-Austria – Adolf Loos (1870-1933),
-Germany-Peter Behrens (1868 – 1940),
- Week No.13** -Netherlands — Berlage (1856-1934),
Scotland — Charles Rennie Mackintosh (1869 – 1928),
- Week No.14** -France – Auguste Perret (1870-1954),
- USA-Louis Sullivan (1856-1924),
- Week No.15** Research presentation and seminar.

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input checked="" type="checkbox"/> Other (to be mentioned):	Quizzes	
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Allosopp	B.A	1971	<i>General History of Architecture</i>	2nd	London, UK	Pitman
(2) Benevolo	L.	1971	<i>History of Architecture</i>	1st	London, UK	R g KEGAN Paul
(3) FOSTER	N.S	1986	<i>New Architecture</i>	1st	London, UK	Royal Academy of Arts
(4) JENCKS	CH.	2001	<i>Architecture 2000</i>	2nd	London, UK	John Wiley&Sons
(5) Jencks	C.	1988	<i>Architecture Today</i>	1st	London, UK	Academy Ed
b- References						
(1) Collins	P.	1965	<i>Changing Ideals In Modern Architecture</i>	1st	London, UK	Faber g Faber
(2) JENCKS	CH.	1982	<i>Current Architecture</i>	1st	London, UK	Academy Editions
(3) Portoghesi	P.	1982	<i>Dopo L'Architettura Moderna, Laterza</i>	2nd	New York	Rizzoli Rome
(4) RISEBERO	B.	1982	<i>Modern Architecture And Design: Alternative History</i>	2nd	London, UK	MIT Pr, Cambrige, Massachusetts
(5) KULTERMANN	U.	1993	<i>Architecture In The 20th Century</i>	1st	New York	Van Nostrad Reinhold
c- Others						
(1) Zaytounah, Salah, the twentieth century architecture .Cairo, 1993.						



Umm Al-Qura University
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Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Theories of Architecture 3		
Code	801317-2		
Prerequisite Course(s)	Theories of Architecture 2	Code	801316-2
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input checked="" type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Mohamed Wahba	Dr. Abdulkareem Hamidaddin	
Lecturer(s)	Dr. Ali Elmansoury	Dr. Tarek Abououf	
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

This course aims to understand and apply the concept of architectural character within the scope of new trends. The course provides a detailed insight into the classification of different architectural movements and their pioneers, as well as the essential characteristics of "Modernism, Late Modernism & Post Modernism" and its different phases. Students begin by studying the different styles of the 19th century to the end of 20th century up to 21st century. Students also learn about the changing architectural vocabulary and new approaches.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Definedifferent between architectural theories, ideologies, technologies and structures that evolved from Modernism period through the late Modernism Period to Post modernism period.
- (a 2) - Explainthe role and relevance of structural systems in creating an intuitive design through the pioneers works.
- (a 3) - Summarize the evolution of architectural theory from the past up to recent times.

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Through intellectual skills, students will be able to:

- (b 1) - Differentiate between architectural trends and movements , philosophies directions and theories comparatively.
- (b 2) - Analyze influencing architectural factors and the surrounding environment and take them into consideration.
- (b 3) - Analyzethe society, its symptoms, needs, available technologies and their reflection on the architectural design structural components and formation.
- (b 4) - Integrate architectural design with the various architectural trends and historical theories

Through professional and practical skills, students will be able to:

- (c 1) - Prepare architectural reports integrating social economical, structural, constructional, environmental dimensions.
- (c 2) - Collect information from different resources to support logical thinking and opinions in architectural discussion
- (c 3) - Assess an architectural work and recognize its weaknesses and strengths based on student study of the trend of modern architecture through late modern architecture to postmodern architecture.
- (c 4) - Generate, develop and evaluate innovative architecture solutions for various environmental problems.
- (c 5) - Use a wide range of analytical and technical tools through pioneers works.
- (c 6) - Prepare, develop and present drawings using an appropriate range of visual, verbal and written media.
- (c 7) - Integrate knowledge of different fields to solve problems throughout the pioneers works .

Through general and transferable skills, students will be able to:

- (d 1) - Present research in seminars or group meetings, discuss findings, and defined their ideas.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively in writing, verbally and through drawings and models.
- (d 4) - Work coherently and successfully as a part of a team in a research work.
- (d 5) - Search for information and adopt life-long self learning and Lead and motivate individuals.

5- Contents

- Week No. 1** Introduction of architectural trends (traditional trends and international trends).
- Week No. 2** Historical background, Ancient trends (the end of 19th century), Pre-Modern Architecture, A. Neo-classicism, and Romanticism (revivalism and eclecticism), Architecture and structure (Joseph Paxton, August Perret and Peter Behrens). current trends (modern and late modern architecture) and futurism (post modern architecture)
- Week No. 3** Modern architecture (1920-1960) The trends and pioneers. (Bauhaus, Functionalism, International Style, Organicism, Constructive and DE-STIJLE).
- Week No. 4** Late-Modern architecture (1960 –1980) The trends and pioneers. (Sculptural architecture, Slick- tech) .
- Week No. 5** Late-Modern architecture (1960 –1980) The trends and pioneers. (Twenties Revivalism, Structuralism)
- Week No. 6** Late-Modern architecture (1960 –1980) The trends and pioneers. (Machine Simulation)
- Week No. 7** Late-Modern architecture (1960 –1980) The trends and pioneers. (Archigram and Metabolism)
- Week No. 8** Late-Modern architecture (1960 –1980) The trends and pioneers. (High-tech)
- Week No. 9** Continuation of the previous lecture and evaluation of Assignment .
- Week No.10** Late-Modern architecture (1960 –1980) The trends and pioneers. (Neo Expressionism , Monumental Expressionism)
- Week No.11** Late-Modern architecture (1960 –1980) The trends and pioneers. (De-construction)
- Week No.12** Post-modern architecture (1980 – 2010). The trends and pioneers. (Historical , Neo-vernacular, Straight trend, Neo Classicism).
- Week No.13** Post-modern architecture (1980 – 2010). The trends and pioneers. Green architecture , Sustainability.
- Week No.14** Post-modern architecture (1980 – 2010). The trends and pioneers. New trends in digital era.
- Week No.15** Research presentation and seminar

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input checked="" type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
	SURNAME,	Initials. (pub. year)	Book title.	Edition. Place of pub:	publisher.
(1)	JENCKS	CH. 2011	<i>The Post Modern Reader</i>	2nd London, UK	John Wiley & Sons
(2)	FOSTER	N.S 1986	<i>New Architecture</i>	1st London, UK	Royal Academy of Arts
(3)	JENCKS	CH. 2011	<i>The Story of Post Modernism</i>	1st UK	John Wiley & Sons
(4)	JENCKS	CH. 2001	<i>Architecture 2000</i>	2nd London, UK	John Wiley & Sons
(5)	KHOLOUSY	M. 2003	<i>Richard Meier</i>	1st B, Lebanon	Dar Qabess
b- References					
(1)	GHIRARDO	D. 1996	<i>Architecture After Modernism</i>	3rd London, UK	Thames & Hudson
(2)	JENCKS	CH. 1982	<i>Current Architecture</i>	1st London, UK	Academy Editions
(3)	Portoghesi	P. 1982	<i>Dopo L'Architettura Moderna, Laterza</i>	2nd New York	Rizzoli Rome
(4)	RISEBERO	B. 1982	<i>Modern Architecture And Design: Alternative History</i>	2nd London, UK	MIT Pr, Cambridge, Massachusetts
(5)	KULTERMANN	U. 1993	<i>Architecture In The 20th Century</i>	1st New York	Van Nostrand Reinhold
c- Others					
(1)					
(2)					
(3)					



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Urban Heritage and Experiences in KSA		
Code	801801-2		
Prerequisite Course(s)	Architectural Design (6)	Code	801372-5
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input checked="" type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Barashed	Dr. Farag Abd Elnaby	
Lecturer(s)	Prof. Magdy El-Bastawisy		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input type="radio"/> Compulsory	<input checked="" type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course comprises the followings: Definition of the concept of preserving the architectural heritage, and the rooting experiences of Architectural Heritage in Saudi Arabia. Introduction study of the physical environment and social/economic of regions of historical value. The concept of architectural heritage of cities and the importance of preserving it. Types and levels of deterioration of historic urban areas. Studying of methods of monitoring and documentation. Analysis of the physical and heritage styles. Analysis of change patterns (urban transformations). Principles of addressing and dealing with important problems of urban areas. Methods of maintaining and upgrading.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Classify Urban heritage areas
- (a 2) - Explain principals of conserving urban heritage
- (a 3) - Record issues of urban heritage

Through intellectual skills, students will be able to:

- (b 1) - Suggest protection methods of urban areas
- (b 2) - Analyze issues of urban heritage
- (b 3) - Criticize development provided to urban heritage

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Appreciate the neatness and aesthetics in design and approach.
- (c 3) - Display imagination and creativity.
- (c 4) - Prepare and present reports.
- (c 5) - Work in a multi-professional working environment.
- (c 6) - Prepare and interpret projects using traditional drawing and/or CAD techniques.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Manage tasks and resources efficiently.
- (d 5) - Collaborate effectively within multidisciplinary team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient IT capabilities.

5- Contents

- Week No. 1** Introduction to urban heritage and experiences in KSA
- Week No. 2** Definition and importance of conservation of urban heritage
- Week No. 3** Kinds, pattern and levels of urban heritage
- Week No. 4** Principals and issues of protecting urban heritage
- Week No. 5** Criteria and methods of preliminary identifying urban heritage
- Week No. 6** Methodology of analyzing and developing urban heritage
- Week No. 7** Approaches and policies of conserving urban heritage
- Week No. 8** Approaches and policies of conserving urban heritage
- Week No. 9** Investment fields in urban heritage areas
- Week No.10** nternational experiences of protecting urban heritage
- Week No.11** nternational experiences of protecting urban heritage
- Week No.12** National experiences of protecting urban heritage
- Week No.13** National experiences of protecting urban heritage
- Week No.14** Presentation and discution of student research work
- Week No.15** Presentation and discution of student research work

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input checked="" type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub:	publisher.
(1) Roinn	A	2011	<i>architectural heritage protection GUIDELINES FOR PLANNING AUTHORITIES</i>	2 nd	DUBLIN	Government of Ireland
Ministry of						
(2) Municipality and Village	1426 H		<i>Guide for the Conservation of Urban Heritage</i>	1 st	Ryaghd	Ministry of Municipality and Village
(3)						
(4)						
(5)						
b- References						
(1)						
(2)						
(3)						
(4)						
(5)						
c- Others						
(1)						
(2)						
(3)						



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Urban planning 1		
Code	801232-2		
Prerequisite Course(s)	Architectural Design 3	Code	801271-5
Recommended Skills			
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input checked="" type="radio"/> 6th <input type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Prof. Abdo Absi		
Language	<input checked="" type="radio"/> Arabic	<input type="radio"/> English	<input type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The course covers the historical study of the city, including its origins and evolution since the dawn of history until the present day. The course contents have been organized into two parts. The first deals with the history of the city and its planning since the ancient civilizations (Egypt, Mesopotamia, the Indus Valley), and the civilizations of the ancient Greeks and Romans, Middle age cities of Europe, the Arab Islamic Cities, the Baroque and Renaissance until the industrial revolution. The second part deals with history of the emergence of contemporary theories of urban planning and impulses that accompanied since its inception at the beginning of the industrial revolution, until the basic principles of planning in the mid-twentieth century.

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Define the meaning of towns
- (a 2) - Characterize the main elements of cities through history
- (a 3) - Illustratethe shapes of towns through different civilizations
- (a 4) - Give examples of the common elements of towns in different civilizations
- (a 5) - Explain the theories of urban planning until the mid-twenties century

Through intellectual skills, students will be able to:

- (b 1) - Apply the urban planning theories on different towns
- (b 2) - Compare between urban planning theories
- (b 3) - Compare between towns planning in different civilizations
- (b 4) - Differentiate between main elements of towns in different civilizations

Through professional and practical skills, students will be able to:

- (c 1) - Work in a team
- (c 2) - Use a wide range of technical tools.
- (c 3) - Prepare and present reports.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within a team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient power point capabilities.
- (d 8) - Manage tasks and resources efficiently.
- (d 9) -

5- Contents

Week No. 1 Introduction to the course

Week No. 2 Prehistoric settlements

Week No. 3 Ancient Egyptians Civilization

Week No. 4 Mesopotamia and Indus Civilization

Week No. 5 Greek Civilization

Week No. 6 Roman Civilization

Week No. 7 Middle Age Europe

Week No. 8 Arab Islamic Cities

Week No. 9 Renaissance Era

Week No.10 Baroque Era

Week No.11 Industrial Revolution Cities

Week No.12 Theories of Urban Planning

Week No.13 Theories of Urban Planning

Week No.14 Theories of Urban Planning

Week No.15 Theories of Urban Planning

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned): Research
Media Employed	<input type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books						
	SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1)	Mumford	L.	1962	<i>The City in History, Its Origins, Its Transformations, and Its Prospects</i>	1st	NY Harcort, Brace & World, Inc
(2)						
(3)						
(4)						
(5)						
b- References						
(1)	Hakim	B.	2008	<i>Arabic-Islamic Cities: Building and Planning Principles</i>		NY EmergentCity Press
(2)	Hall	P.	2002	<i>Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century</i>	3rd	London Wiley-Blackwell
(3)	Morris	A.E	1994	<i>History of Urban Form: Before the Industrial Revolution,</i>	3rd	Oxford Longman
(4)	Kostof	S.	1993	<i>The City Shaped: Urban Patterns and Meanings Through History</i>	1st	NY Bulfinch
(5)	Kostof	S.	1992	<i>The City Assembled: The Elements of Urban Form Through History</i>	1st	NY Bulfinch
c- Others						
(1)	www.whc.unesco.org					
(2)	www.ovpm.org/					



Umm Al-Qura University
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Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Urban planning 2		
Code	801333-2		
Prerequisite Course(s)	Urban Planning1	Code	801232-2
Recommended Skills			
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input checked="" type="radio"/> 7th <input type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Khaled Sami	Prof. Abdo Absi	
Lecturer(s)	Prof. Khaled Sami		
Language	<input type="radio"/> Arabic	<input type="radio"/> English	<input checked="" type="radio"/> Both
Relation to curriculum	<input checked="" type="radio"/> Compulsory	<input type="radio"/> Elective	

2- ECTS / Student Workload

Workload	Contact Hours	30	Hour(s) /Semester		
	Self-study	45	Hour(s) /Semester		
	Total	75	Hour(s) /Semester		
Credit Points according to ECTS	3	point(s)	Credit Hours	2	Hour(s)

3- Module Summary

The main objective of this course is to give the student an introduction to urban planning. The course comprises the followings: various processes of urban planning and land use (residential, commercial, industrial). The difference between contemporary trends for the neighborhood planning , (planning neighboring residential), Stages of urban planning in the KSA. Building regulations mentioning some examples to the planning study in Saudi Riyadh , Jeddah , Mecca , urban -scale system in the Kingdom. Elements analysis and components of the city in general .

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Classify the meaning of towns
- (a 2) - Characterize the main elements of cities through history
- (a 3) - Illustratethe shapes of towns through different civilizations
- (a 4) - Give examplesof the common elements of towns in different civilizations
- (a 5) - Explain the theories of urban planning until the mid-twenties century

Through intellectual skills, students will be able to:

- (b 1) - Apply the urban planning theories on different towns
- (b 2) - Compare between urban planning theories
- (b 3) - Compare between towns planning in different civilizations
- (b 4) - Differentiatebetween main elements of towns in different civilizations

Through professional and practical skills, students will be able to:

- (c 1) - Work in a team.
- (c 2) - Use a wide range of technical tools.
- (c 3) - Prepare and present reports.

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Collaborate effectively within a team.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient power point capabilities.
- (d 8) - Manage tasks and resources efficiently.

5- Contents

Week No. 1 Approach in the importance of planning and urban development in the currency, economic, social etc.

Week No. 2 - Types of planning, planning levels.

Week No. 3 - Types of planning, planning levels.

Week No. 4 -Planning guideline for the city: definitions, content and students exploratory and comprehensive and their contents.

Week No. 5 Basics in urban planning.

Week No. 6 city shapes and the main elements of its component

Week No. 7 The criteria used to determine the area of the city.

Week No. 8 Residential and building densities and the rate of investment and its relationship to the land uses.

Week No. 9 city center, elements and levels, and planning problems and their solutions.

Week No.10 green areas in cities types ,composition hierarchy and standards etc.

Week No.11 industrial areas , types ,its planning basic principles

Week No.12 Residential areas, levels and basic services.

Week No.13 residential Neighborhood ,elements, densities of and services

Week No.14 - residential Neighborhood ,elements, densities of and services

Week No.15 Roads classification and Planning

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned): Research
Media Employed	<input type="checkbox"/> Whiteboard	<input checked="" type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	35 %	Final Exam	50 %
	Mid-term Exam	15 %	Total	100 %
Forms of Examination	<input checked="" type="checkbox"/> Written Examination	<input type="checkbox"/> Drawing Examination		
	<input type="checkbox"/> Assignments	<input type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):		
Examination Requirements	<input checked="" type="checkbox"/> Lecture Room	<input type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books				
SURNAME,	Initials.	(pub. year)	Book title.	Edition. Place of pub: publisher.
(1) Absi	A.	2012	Urban planning - Dr.abdo Absi - binding	1st Umm Aqura univ. KSA UQU
(2) shafag	A.	2007	Planning Alamrani- (Alasca- services - Movement) (Arabic)	Egypt
(3) Allam	K.	1998	Urban Planning (Arabic)	Egypt Anglo-Massr
(4)				
(5)				
b- References				
(1)				
(2)				
(3)				
(4)				
(5)				
c- Others				
(1)	www.whc.unesco.org			
(2)	www.ovpm.org/			



Umm Al-Qura University
College of Engineering and Islamic Architecture
Department of Islamic Architecture
Programme: Islamic Architecture (Architecture)

Handbook of Module Specifications

1- General Information

Module Designation	Working Drawings		
Code	801357-2		
Prerequisite Course(s)	Building construction 4	Code	801327-2
Recommended Skills	None		
Semester Level <i>(in which the module is taught)</i>	<input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd <input type="radio"/> 4th <input type="radio"/> 5th <input type="radio"/> 6th <input type="radio"/> 7th <input checked="" type="radio"/> 8th <input type="radio"/> 9th <input type="radio"/> 10th		
Person responsible for the module	Prof. Magdy El-Bastawisy	Prof. Ehab Rached	
Lecturer(s)	Dr. Jamil Alsalafi Prof. Ehab Rached	Prof. Mohamed Atef Dr. Said Mansi	Prof. Mohamed Wahba Dr. Mohamed Aljefri
Language	<input type="radio"/> Arabic <input type="radio"/> English <input checked="" type="radio"/> Both		
Relation to curriculum	<input checked="" type="radio"/> Compulsory <input type="radio"/> Elective		

2- ECTS / Student Workload

Workload	Contact Hours	60	Hour(s) /Semester
	Self-study	75	Hour(s) /Semester
	Total	135	Hour(s) /Semester
Credit Points according to ECTS	5	point(s)	Credit Hours 2 Hour(s)

3- Module Summary

The course comprises the followings: Establishing a strong foundation to know the basic shop drawings for one of the projects which had already been designed by the student. Mastering the basic shop drawings of an architectural project. Ability to prepare and draw the architectural details of the project. Being familiar with the preparation of quantities and project items. Writing technical project specifications. Mastering the production of shop drawings for the project using appropriate computer applications. Provision of linkage and dealing methods with other engineering disciplines (structural, electrical, mechanical, health, civil, landscape, ...) and their respective roles in the shop drawings preparation for the project

b- Intended Learning Outcomes of the Module

Through knowledge and understanding, students will be able to:

- (a 1) - Describe characteristics of architectural materials
- (a 2) - Explain the concepts and Methodologies of solving Construction Problems.
- (a 3) - Describe principles of building technologies, structure & construction methods, technical installations, properties of materials, and the way they may influence design decisions.
- (a 4) - Classify fundamentals of building acquisition, operational costs, and of preparing construction documents and specifications of materials, components, and systems appropriate to the building.
- (a 5) - Define the preparation of quantities and project items, Writing technical project specifications.

Through intellectual skills, students will be able to:

- (b 1) - Determine and develop a systematic method approach in dealing with new and advancing technology
- (b 2) - Select Integrate different forms of knowledge, ideas from other disciplines, and manage information retrieval to create new solutions.
- (b 3) - Suggest and reconcile conflicting objectives and manage the broad constituency of interests to reach optimum solutions.
- (b 4) - Integrate relationship of structure, building materials, and construction elements into design process.
- (b 5) - Compare and discuss research and formulate informed opinions appropriate to specific context and circumstances affecting architecture profession & practice.

Through professional and practical skills, students will be able to:

- (c 1) - Integrate knowledge of deferent fields to solve problems.
- (c 2) - Generate, develop and evaluate innovative solutions for various problems.
- (c 3) - Use a wide range of analytical and technical tools.
- (c 4) - Prepare and present reports.
- (c 5) - Work in a multi-professional working environment.
- (c 6) - Merge professionally the architectural knowledge, understanding, and feedback to improve design, construction and/or services.
- (c 7) - Produce professional workshop and technical drawings using traditional drawing and computer-aided drawings' techniques.
- (c 8) - Use appropriate construction techniques and materials to specify and implement different designs.
- (c 9) - Participate professionally in managing construction processes

Through general and transferable skills, students will be able to:

- (d 1) - Search for information and adopt life-long self learning.
- (d 2) - Refer to relevant literature effectively.
- (d 3) - Communicate effectively.
- (d 4) - Work in stressful environment and within constraints.
- (d 5) - Manage tasks and resources efficiently.
- (d 6) - Lead and motivate individuals.
- (d 7) - Demonstrate efficient IT capabilities.

5- Contents

- Week No. 1** • Introduction to Working Drawing and construction methods
- Week No. 2** •An overview of the selected projects and determining the project for each student
- Week No. 3** Floor plans (Ground floor plans) lecture discusses basic information in how to delineate lengths, thicknesses, and character of the outside walls and inside partitions at the particular floor level. It also shows how to mark out the axis, dimensions, widths and locations of doors and windows, and other utility features.
- Week No. 4** •Typical floor plans
- Week No. 5** •Basement plans
- Week No. 6** • Roof plans
- Week No. 7** • Sections lecture discusses how a structure looks when cut vertically by a cutting plane, providing important information about construction systems, heights, levels and materials used.
•Elevations lecture discusses how to draw the front, rear, and sides of a structure, as they would appear projected on vertical planes in order to give a working idea of the appearance and overall shape and finishes of the structure.
- Week No. 8**
- Week No. 9** • Site plan (Layout) lecture discusses the essential data for laying out the building considering any contours, boundaries, roads, utilities, trees, structures, and any other significant physical features on or near the construction site.
- Week No.10** •Sanitary drawings(Water supply systems and plumbing fixture)
- Week No.11** •Sanitary Drainage and sewage disposal systems
- Week No.12** •Electrical drawings (Electric power and lighting outlets)
- Week No.13** •Electric power and lighting outlets.
- Week No.14** the architectural details of the project.
- Week No.15** The preparation of quantities and project items , technical project specifications.

6- Teaching and Learning Methods

Type of teaching	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Seminars & Discussion Sessions
	<input checked="" type="checkbox"/> Class Activities	<input checked="" type="checkbox"/> Field Visit
	<input type="checkbox"/> Laboratory Experiment	<input type="checkbox"/> Other (to be mentioned):
Media Employed	<input type="checkbox"/> Whiteboard	<input type="checkbox"/> Working Documents
	<input checked="" type="checkbox"/> Data show	<input type="checkbox"/> Other (to be mentioned):

7- Student Assessment

Procedures used and Weight of Assessment	Continuous Assessment	50 %	Portfolio	10 %
	Mid-term Exam	15 %	Final Exam	25 %
			Total	100 %
Forms of Examination	<input type="checkbox"/> Written Examination	<input checked="" type="checkbox"/> Drawing Examination		
	<input checked="" type="checkbox"/> Assignments	<input checked="" type="checkbox"/> Research and Discussions		
	<input type="checkbox"/> Oral Examination	<input type="checkbox"/> Other (to be mentioned):	Final project	
Examination Requirements	<input type="checkbox"/> Lecture Room	<input checked="" type="checkbox"/> Design Studio		
	<input type="checkbox"/> Computer Lab.	<input type="checkbox"/> Laboratory		
	<input type="checkbox"/> Specific Equipment	<input type="checkbox"/> Other (to be mentioned):		

8- Reading List

a- Text Books					
SURNAME,	Initials.	(pub. year)	Book title.	Edition.	Place of pub: publisher.
(1) Barry	R	1999	<i>The Construction of Buildings (Vol 1,2,3,4)</i>	7	USA Blackwell Publication
(2) Emmit	Ste	2010	<i>Barry s Introduction of Construction of Buildings</i>	2	USA Blackwell Publication
(3) Keith	Sty	2004	<i>Working Drawings Handbook</i>	4	New York Architectural press
(4) Sitt	Fre	1998	<i>Working Drawing Manual</i>	1	USA MCGRAW-HILL
(5)					
b- References					
(1) Susan	Daw	1999	<i>Working Details (volume 1 to 8)</i>		UK The Architects Journal
(2) Ching	Fra	2008	<i>Building Construction Illustrated</i>	5	USA John Wiley&Sons,Inc.
(3)					
(4)					
(5)					
c- Others					
(1)					
(2)					
(3)					