Module (Course Syllabus) Catalogue

2022-2023

College/ Institute	**Shaqlawa technical college**	
Department	**Architectural Technique – Evening**	
Module Name	**Building construction and materials**	
Module Code	**BUC204**	
Degree	**Technical Diploma** [*] **Bachler** [ ] **High Diploma** [ ] **Master** [ ] **PhD** [ ]	
Semester	**Second**	
Qualification	**MSc**	
Scientific Title	**Lecturer**	
ECTS (Credits)	**6**	
Module type	**Prerequisite** [ ] **Core** [*] **Assist.** [ ]	
Weekly hours	**4**	
Weekly hours (Theory)	**(4) hr Class**	**(165) Total hrs Workload**
Weekly hours (Practical)	**(0) hr Class**	**(0) Total hrs Workload**
Number of Weeks	**12**	
Lecturer (Theory)	**Mohamed Moafak Aziz**	
E-Mail & Mobile NO.	mohamed.arbili@epu.edu.iq , 07504051321	
Lecturer (Practical)		
E-Mail & Mobile NO.		
Websites	**https://academicstaff.epu.edu.iq/public/faculty/mohamed.arbili**	

Course Book

<table>
<tr><td>Course Description</td><td>The field of building construction combines traditional knowledge with modern construction methods, emphasizing the proper selection of materials, ensuring adequate strength and performance, maximizing utility, and achieving good proportions. This course provides students with an in-depth understanding of the fundamental steps and elements of building construction, as well as practical experience applying the principles and practices of construction. During the lecture component of the course, students will be introduced to stud systems, methods, materials, and equipment commonly used in light construction projects.</td></tr>
<tr><td>Course objectives</td><td>This course covers a range of alternative methods for building, including various structural systems and enclosure systems. The course provides comprehensive instruction on building construction, covering everything from foundation and masonry wall construction to frame construction and concrete construction details. Lecture notes are carefully prepared and presented in an easily understandable style, with various figures, sketches, and tables arranged in a systematic manner to enhance student comprehension of the building construction process. As a result, students are able to effectively learn the principles and practices of building construction.</td></tr>
<tr><td>Student's obligation</td><td>The students are expected to fulfill the following requirements:
1. Attend all lectures with readiness.
2. Come prepared for each lecture on a daily basis.
3. Be ready for quizzes or exams after each lecture.
4. Be prepared to submit reports and presentations as required.
5. Collaborate effectively with group members.
6. Have access to a scientific calculator.</td></tr>
<tr><td>Required Learning Materials</td><td>▸ Projector
▸ White board
▸ Power Point Presentation
▸ Scientific Debate
▸ Work Group</td></tr>
<tr><td>Evaluation</td><td>
<table>
<tr><th colspan="2">Task</th><th>Weight (Marks)</th><th>Due Week</th><th>Relevant Learning Outcome</th></tr>
<tr><td rowspan="4">Assignments</td><td>Homework</td><td>10</td><td></td><td></td></tr>
<tr><td>Class Activity</td><td>2</td><td></td><td></td></tr>
<tr><td>Report</td><td rowspan="2">16</td><td></td><td></td></tr>
<tr><td>Seminar</td><td></td><td></td></tr>
<tr><td colspan="2">Quiz</td><td>8</td><td></td><td></td></tr>
<tr><td colspan="2">Midterm Exam</td><td>24</td><td></td><td></td></tr>
<tr><td colspan="2">Final Exam</td><td>40</td><td></td><td></td></tr>
<tr><td colspan="2">Total</td><td>100</td><td></td><td></td></tr>
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Specific learning outcome:	After completing these students will be able to explain in the following area: 1- Classification of buildings according to design &methods of construction. 2- Construction of different types of foundation including groundwater control and dewatering part. 3- Masonry work by using different masonry unit and bonding styles. 4- Having useful knowledge about materials and method of building construction.
Course References:	**Key references:** ▸ Building Construction, Ahmad Hussein Odeh, Arab Society, 2004. ▸ Magazines and review (internet)

Course topics (Theory)	Week	Learning Outcome
References, syllabus, introduction, building construction.	1	
Cycle process of building construction and stages of construction equipment.	1	
Type of building, design loads.	1	
Basic building components, structural elements, beam, columns, walls.	1	
Footing and Foundations(Wall Footing, Strip Footing, Isolated Footing, Raft Footing, Piles Foundation, Piers, Retaining Walls)	2	
Super of structure elements, type of roof, type of floors.	1	
Stairs and scientific trip.	1	
Concrete works.	1	
Construction materials(solid block, masonry, ceramics, bricks, forms ,reinforcement, plastic, lime,..	1	
Finishing works.	1	
Review.	1	

Questions Example Design

Q1/ What are the Components of a Building Structure? Number it. (30marks)

Q2/ What are the type of foundations? explain them briefly. (35 marks)

Q3) What are the steps in constructing a building? explain it. (35 marks)

Extra notes:

The lectures should primarily focus on theatrical sessions as they provide a more effective learning experience for students. In addition, instead of traditional exams, higher marks should be given for theatrical exams or assignments such as seminars or homework.

External Evaluator