TISHK INTERNATIONAL UNIVERSITY
FACULTY OF ENGINEERING
Department of ARCHITECTURE,
2021-2022 Fall
Course Information for ARCH 212 BUILDING CONSTRUCTION TECHNOLOGY

Course Name:	BUILDING CONSTRUCTION TECHNOLOGY

Code	Regular Semester	Theoretical	Practical	Credits	ECTS
ARCH 212	3	2	2	3	6

Name of Lecturer(s)-Academic Title:	Carol Kharbosh - MSc
Teaching Assistant:	Ms. Lana & Ms. Jenan
Course Language:	English
Course Type:	Main
Office Hours	Monday 10.00-12.00
Contact Email:	carol.kharbosh@tiu.edu.iq Tel:+9647504148626
Teacher's academic profile:	Assistant Lecturer at the Department of Architectural Engineering BSc in Architectural Engineering - Salahaddin University Erbil (2017) MSc in Architecture - Specializing in Architectural and Interior Design - Budapest University of Technology and Economics (2020)
Course Objectives:	Building Construction is an introduction to the techniques, materials, and structural systems used in the construction process of any Building. Building Construction classes will focus on the main components of the building and their connections. The classes of Building Construction course have two parts, the first part is Theoretical class where all the required information for the practical part will be provided, and the second part is Practical class where the students will be asked to design and draw in the Drawing studios what they have learned during the Theoretical class. Topics of this course include Components, Materials and Techniques used in Building Construction process which include (Masonry walls (Brick & Block), Floors and Slabs (Concrete and Reinforced Concrete), Opening (Doors and Windows), Finishing Materials, and Connection Techniques). During the Course the students will be asked to visit material stores and Construction sites to have a clear idea about the available materials and techniques in the Local Market.
Course Description (Course overview):	To introduce construction & structural system to students in general , then to develop his knowledge to use buildings as environmental shell , this course Includes course material in my first two parts are exposed to the principles of public (and particularly solid system) and the second deals with practical ways to express the problems of synthetic architectural language as the application of theoretical material. Permeates the study site visits to student recognizes the fact constructivist manner.

COURSE CONTENT

Week	Hour	Date	Topic
1	2	4-7/10/2021	Introduction to building Construction 1
2	2	10-14/10/2021	Masonry Wall (Brick)
3	2	17-21/10/2021	Masonry Wall (Block & Stone)
4	2	24-28/10/2021	Concrete & Reinforced Concrete
5	2	31/10-4/11/2021	Doors (Types and Properties)
6	2	7-11/11/2021	Windows (Types and Properties)
7	2	14-18/11/2021	Midterm Exam
8	2	21-25/11/2021	Midterm Exam
9	2	28/11-2/12/2021	Interior Finishing (Types and Properties)
10	2	5-9/12/2021	Exterior Finishing (Types and Properties)
11	2	12-16/12/2021	Connection Details
12	2	19-23/12/2021	Connection Details
13	2	26-30/12/2021	Project (Consultation)

14	2	2-5/1/2022	Project (Consultation)
15	2	9-13/1/2022	Final Exam
16	2	16-20/1/2022	Final Exam

COURSE/STUDENT LEARNING OUTCOMES

1	Understanding the engineering behavior of different types of building materials.
2	Professionally prepare Construction Drawings.
3	Have an idea about the available materials in the local construction market.
4	Building construction classes will help students master the control of their realization process.

COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES

(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced)

	Program Learning Outcomes	**Cont.**
1	Apply problem-solving skills in the architectural context.	P
2	Demonstrate knowledge of architectural history, theory, and practice in solving architectural design problems.	I
3	Utilize freehand drawing, architectural graphics, and model building skills in solving architectural design problems.	I
4	Utilize the computer as a tool in a wide range of documentation and presentation applications, using CAD, 3-D visualization and rendering, electronic image composition and editing software.	I
5	Apply knowledge of mathematics, science, engineering and technology in solving architectural design problems.	P
6	Develop designs that meet desired needs within realistic economic, social, political, and cultural constraints.	I
7	Develop designs that fulfill the environmental, health & safety, and sustainability considerations.	A
8	Demonstrate team-working skills and show the ability to work collaboratively with various design teams involved in the building industry, and collaborate and negotiate with clients.	A
9	Demonstrate the necessary knowledge for applying laws, codes, regulations, standards and practices in relation to building construction systems.	A
10	Show their ideas through high quality drawing skills and artistic sense.	I
11	Utilize their skills to address professional and ethical responsibilities, diversity and commitment to the work field.	
12	Suggest solutions and techniques for engaging in life-long learning and knowledge about contemporary issues.	P

Prerequisites (Course Reading List and References):	Francis D. K. Ching - Building construction illustrated - 5th Edition - John Wiley & Sons (2019) B.C. Punmia; Ashok Kumar Jain; Arun Kumar Jain, Firewall Media - Building construction (2005)
Student's obligation (Special Requirements):	The attendance of students in the lectures is mandatory. He / she is required to continuously follow the lectures, submits homework and assignments.

Weekly Laboratory/Practice Plan:

Week	**Hour**	**Date**	**Topics**
1	2	4-7/10/2021	Introduction to building Construction1
2	2	10-14/10/2021	Masonry Wall (Brick)
3	2	17-21/10/2021	Masonry Wall (Block & Stone)
4	2	24-28/10/2021	Concrete & Reinforced Concrete
5	2	31/10-4/11/2021	Doors (Types and Properties)
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	13	2	26-30/12/2021	Project (Consultation)
	14	2	2-5/1/2022	Project (Consultation)
	15	2	9-13/1/2022	Final Exam
	16	2	16-20/1/2022	Final Exam

Course Book/Textbook:	Francis D. K. Ching - Building construction illustrated - 5th Edition - John Wiley & Sons (2019) Arthur Lyons - Materials for Architects and Builders-Routledge (2014) B.C. Punmia; Ashok Kumar Jain; Arun Kumar Jain, Firewall Media - Building construction (2005) David Hancock - Brick Bonding (The Rules of Bonding and 100 + Advanced Craft Questions with Answers) - Macmillan Education UK (1990)
Other Course Materials/References:	https://www.wicona.com/en/int/
Teaching Methods (Forms of Teaching):	Lectures, Practical sessions, Project, , ,

COURSE EVALUATION CRITERIA

Method	Quantity	Percentage (%)
Homework	1	15
Project	1	20
Midterm Exam	1	15
Classwork	1	10
Final Exam	1	40
Total		**100**

Examinations: Essay Questions, Short Answers, Drawing, ,

Extra Notes:

ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD

Activities	Quantity	Workload Hours for 1 quantity*	Total Workload
Theoretical Hours	16	2	32
Practical Hours	16	2	16
Final Exam	1	15	15
Homework	1	1	1
Project	1	60	60
Midterm Exam	1	20	20
Classwork	1	3	3
Total Workload			**147**
ECTS Credit (Total workload/25)			**5.88**

Peer review

Signature:	Signature:	Signature:
Name:	Name:	Name:
Lecturer	Head of Department	Dean