TISHK INTERNATIONAL UNIVERSITY
FACULTY OF ENGINEERING
Department of CIVIL ENGINEERING,
2020-2021 Spring
Course Information for CE 220 BUILDING CONSTRUCTION

Course Name:	BUILDING CONSTRUCTION

Code	Regular Semester	Theoretical	Practical	Credits	ECTS
CE 220	4	4	-	4	

Name of Lecturer(s)-Academic Title:	Twana Ahmad -
Teaching Assistant:	DIYARI B. HUSSEIN - MSc
Course Language:	English
Course Type:	Main
Office Hours	Wednesday, 08:30 am to 12:00, Tuesday 2.30 --4.30
Contact Email:	twana.ahmad@tiu.edu.iq Tel:07703551635
Teacher's academic profile:	MSc in Civil Engineering
Course Objectives:	The course covers building construction of selective topics to reach requirement of civil engineering degree students. Throughout this course many alternative ways of building are described: different structural systems, and different systems of enclosure. Building construction has the details of making buildings from foundations, masonry and wall masonry construction to frame construction systems; steel and concrete construction details. Lecture notes are prepared and given to the students with special care and in easily understandable style. Various figures, sketches and tables are arranged in a systematic manner to enable students effectively learn the course of building construction. The objective of this course continues to be to guide construction engineers in a manner that will attain the best possible results. It is believed that the material presented is comprehensive enough to serve as the basic text for a variety of construction courses. As building activities take place all around us all the time, the subject of Building Construction should ideally be taught not as a long list of information, but to act as a stimulant to the students for the observation of actual buildings already built as well as the buildings that are built around them. The students should learn more from observation and practice.
Course Description (Course overview):	Introduction, course outline, Foundations, Masonry, Masonry wall construction, Concrete construction, Steel frame construction, Sitecast concrete framing systems, Interior Walls and Partitions, Finish Ceilings and Floors

COURSE CONTENT

Week	Hour	Date	Topic
1	4	31/1-4/2/2021	Registration
2	4	7-11/2/2021	Introduction of Syllabus and Types of Building, Site Preparation, and Setting out Works
3	4	14-18/2/2021	Earthwork (Shoring of small and large excavation), Earthwork (Ground water control, and Earthmoving), and Production of Earth-moving Equipment
4	4	21-25/2/2021	Excavation, Equipment for excavation, and Estimation of excavation equipment, and Site Visit
5	4	28/2-4/3/2021	Trenching and Trenching Technology, and Hauling of Earth-moving Materials, and Compaction of Earth-moving Materials & Estimation of Machine Production
6	4	7-11/3/2021	Foundation and Footing
7	4	28/3-1/4/2021	Deep Foundation, Piles (Types, places to be used).
8	4	4-8/4/2021	Masonry Work, Brick, Block and Stone
9	4	11-15/4/2021	Midterm Exam
10	4	18-22/4/2021	Masonry Work, Brick, Block and Stone

11	4	25-29/4/2021	Frame Structures, Beams, Columns, supports over opening and arches.
12	4	2-6/5/2021	Frame Structures, Beams, Columns, supports over opening and arches.
13	4	9-13/5/2021	Types of floors and floor finishes.
14	4	16-20/5/2021	Forms and Scaffoldings
15	4	23-27/5/2021	Forms and Scaffoldings
16	4	30/5-3/6/2021	Thermal insulation, Joints in Buildings
17	4	6-10/6/2021	Final Exam
18	4	13-17/6/2021	Final Exam

COURSE/STUDENT LEARNING OUTCOMES

1	Classification of buildings according to design & methods of construction.
2	Demonstration of tools and plants used in building construction.
3	Masonry work by using different masonry unit and bonding styles.
4	Having useful knowledge about materials and methods of building construction.
5	Recognizing composing elements of frame (skeleton) structure and method of construction of them.

COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES

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

	Program Learning Outcomes	**Cont.**
1	An ability to apply knowledge of mathematics, science, and engineering	A
2	An ability to design and conduct experiments, as well as to analyze and interpret data	I
3	An ability to design a system, component, or process to meet desired needs	I
4	An ability to identify, formulate and solve engineering problems	P
5	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	P
6	Skills in project management and recognition of international standards and methodologies	P
7	An ability to function on multi-displinary teams	A
8	An understanding of professional and ethical responsibility	P
9	An ability to communicate effectively	A
10	The broad education necessary to understand the impact of engineering	P

Prerequisites (Course Reading List and References):	Students required to have the information about Building Materials & Concrete Technology, in order to understand this course in the effective way.
Student's obligation (Special Requirements):	1- No cell phone is allowed during the lectures, laboratories and examinations. 2- Punctuality is highly encouraged. 3- Exam and quizzes are closed book 4- Assignments and test reports have to be submitted at the specified date. 5- Lectures are uploaded at the lecturer's website, students has to download form the given address
Course Book/Textbook:	Fundamentals of Building Construction (Materials & Methods) by; E. Allen & J. Iano • Building Construction by W.B Makay • Building construction illustrated by Francis D.K. Ching. • The construction of building by R.BARRY • Building construction by Dr. B.C.Punmia • Building construction by S.KSHARMA
Other Course Materials/References:	- Fundamentals of Building Construction (Materials & Methods) by; E. Allen & J. Iano. 2- Building Design and Construction Handbook; Frederick S. Merritt & Jonathan T. Ricketts Editors. 3- Building Construction Handbook by; R. Chudley & R. Greeno (2010). 4- Building Construction by; Dr.BC.Punmia, Ashok Kumar Jain, and Arun Kumar Jain • Construction teqnology by S.S. Ataev • عاطف السهيري المباني انشاء • زهير ساكو المباني انشاء - ليفون ارتين
Teaching Methods (Forms of Teaching):	Lectures, Presentation, Self Evaluation, Project, Case Studies

COURSE EVALUATION CRITERIA

Method	**Quantity**	**Percentage (%)**
Participation	5	1
Quiz	5	2

Project	1	10
Midterm Exam(s)	1	30
Presentation	1	5
Final Exam	1	40
Total		**100**

Examinations: Essay Questions, Fill in the Blanks, Multiple Choices, Short Answers

Extra Notes:

ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD

Activities	Quantity	Workload Hours for 1 quantity*	Total Workload
Theoretical Hours	18	4	72
Practical Hours	18	0	0
Final Exam	1	16	16
Participation	5	2	10
Quiz	5	2	10
Project	1	10	10
Midterm Exam(s)	1	8	8
Presentation	1	4	4
Total Workload			**130**
ECTS Credit (Total workload/25)			**5.2**

Peer review

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