

Jordan University of Science and Technology Faculty of Architecture And Design Architecture Department

ARCH152 Building Construction (1) Materials

Second Semester 2023-2024

Course Catalog

3 Credit Hours. This course is introductory to construction of buildings. It deals with basic construction materials used as brick, cement, gypsum, steel, timber, etc. it describes their main types, characteristics, their use, and function. It will also cover the modern construction materials such as prestressed concrete, float glass, extruded aluminum, advanced gypsum products, plastics, the miraculous materials of construction developed recently. This course will consider the preparation of construction sites, soil investigation, building codes used in construction practices.

Teaching Method: Blended

Text Book							
Title	Materials for Architects and Builders						
Author(s)	Arthur Lyons						
Edition	4th Edition						
Short Name	REF#1						
Other Information							

Course References

Short name	Book name	Author(s)	Edition	Other Information
REF#2	Fundamental Of Building Construction, Materials And Methods	Edward Allen	19th Edition	
REF#3	Building construction illustrated	ching, francis D.K	4th Edition	
REF#4	A Text Book Of Building Construction	Sharma, S.K.	6th Edition	
FER#5	Construction Materials, Their Nature And Behavior	Domone,p.,Illston j	4th Edition	

	Instructor
Name	Miss Hind Al Momani
Office Location	-
Office Hours	Sun : 09:30 - 11:30 Mon : 11:30 - 13:00 Tue : 09:30 - 11:30 Wed : 11:30 - 12:00
Email	hindmomani@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue : 08:30 - 09:30

Room: A2120

Section 2:

Lecture Time: Mon: 13:00 - 14:30

Room: A3131

Tentative List of Topics Covered							
Weeks	Topic	References					
Weeks 1, 2	General introduction,Making buildings,	From REF#3					
Weeks 3, 4	Building site, soil investigation						
Weeks 5, 6	block & brick masonry						
Weeks 7, 8	STONE MASONRY						
Weeks 9, 10	concrete construction						
Weeks 10, 11	Precast Concrete						
Week 12	Metals in construction						
Weeks 13, 14	Wood construction						

Week 14	Polymers , plastic, and glasses	From REF#1 , From REF#2
Week 15	Finalizing Presentations	

Mapping of Course Outcomes to Program Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Recognize the different types of construction materials, use and function, and their main characteristics [100B.B8]	40%	
Realize that the appropriate selection of interior and exterior construction materials, finishes, and products, is based on their inherent characteristics, performance, and visual appearance. [100B.B8]	20%	
Understand the performance of the material, aesthetically, moisture transfer, durability?as components within any envelop system	20%	
Analyze the impacts of site construction practices	10%	
Create a base knowledge of research and communication skills through research, discussions, presentations and writing on specific construction topics	10%	

Relationship to Program Student Outcomes (Out of 100%)																									
A.A1	A.A2	A.A3	A.A4	A.A5	A.A6	A.A7	A.A8	B.B1	B.B2	B.B3	B.B4	B.B5	B.B6	B.B7	B.B8	B.B9	B.B10	C.C1	C.C2	C.C3	D.D1	D.D2	D.D3	D.D4	D.D
															60										

Evaluation							
Assessment Tool	Weight						
clo 1 first exam	25%						
clo 2 second exam	25%						
clo 2 final exam	40%						
assignment	10%						

	Policy
Attendance	Attendance will be checked at each class and the university regulations will be strictly followed for student exceeding the maximum rate of absences.
Distractions	Use of Cell Phones, Pagers, and all other communication devices is forbidden during class time. students using any form of chat or peer to peer software will be asked to leave the class.
Cheating	Cheating is not tolerated and against the university rules. Cheating will result in failing the course and reporting the incidence to the dean of the college of architecture and design.
USEFUL RESOURCES	1- References 2- Handouts and notes 3-selected readings from the references. 4-Pioneer Architectural firms

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