

The Hashemite University Faculty of Engineering Course Syllabus Department of Civil Engineering

Course Title:Building ConstructionDesignationElectiveInstructor:Dr. Odey AlshboulOffice Hours:Image: Construction

Course Number:110401545Prerequisite:110401421E-mail: odey.shboul@yahoo.com

• Course Description (catalog): In this course, many alternative ways of building are described: different structural systems, different systems of enclosure, and different systems of interior finish.

• Textbook(s) and/or Other Supplementary Materials:

- Fundamentals of Building Construction Materials and Methods; by Edward Allen & Joseph Iano; 5th Edition.
- **References:** Allen, E., & Iano, J. (2011). Fundamentals of building construction: materials and methods. John Wiley & Sons.

• Major Topics Covered:

Topic	No. of Weeks	Contact hours*		
Reinforced concrete slabs(5	15		
Introduction+one-way solid slab).				
Reinforced concrete slabs(one-way solid				
slab+two way solid slab).				
Reinforced concrete slabs(one-way hollow				
slab+two-way hollow slab) and calculation				
the dead load of different slabs .				
First Exam				
Foundations(single Footing+ combined	5	15		
footing).				
• Foundations(wall Footing and trapezoidal				
footing) and Eccentricity.				
Second Exam				
Timber Design	5	15		
• Stair Design ,Cement plastering and				
Masonary work.				
• Water damp proofing , lintel design and				
Joints in structures.				
Total	15	45		

*Contact hours include lectures, quizzes and exams

• Specific Outcomes of Instruction (Course Learning Outcomes):

After completing the course, the student will be able to:

- 1. Defines the different construction systems in buildings and their components. (2,7)
- 2. Define the sequence and methods of construction in buildings. (2)
- 3. Recognizes the types of structural elements such as ceilings, columns and beams, as well as the finishing works. (2)

• Student Outcomes (SO) Addressed by the Course:

#	Outcome Description	Contribution	
General Engineering Student Outcomes			
1	an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics		
2	an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	Н (60)	
3	an ability to communicate effectively with a range of audiences		
4	an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts		
5	an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives		
6	an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions		
7	an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.	M (40)	
H=High, M= Medium, L=Low			

Assessments, Methods and Evaluation Criteria

Course Grading Policy	Date	Percentage
First Exam	4/4/2023 (Tuesday)	30%
Second Exam	16/5/2023 (Tuesday)	30%
Final Exam		40%
Total		100%

General Notes: Beware of Plagiarism: copying and handing in for credit someone else's work. Any plagiarism case will result in an automatic 'F' for the course