جامعة المجمعة
Majmaah University

Course Specifications

Muharram 1437 H

Institution:	Majmaah University
Academic Department :	Civil & Environmental Engineering
Programme :	Civil Engineering
Course :	Building Construction
Course Coordinator :	Dr. Amjad Khabaz
Programme Coordinator :	Dr. Sameh S Ahmed
Course Specification Approved Date :	10/ 5 / 1437 H

This form compatible with NCAAA 2013 Edition

A. Course Identification and General Information

1 - Course title : **Building Construction** Course Code: **CE 424**			
2. Credit hours : **3(3,1,0)**			
3 - Program(s) in which the course is offered: **Civil Engineering**			
4 – Course Language : English			
5 - Name of faculty member responsible for the course: **Amjad Khabaz**			
6 - Level/year at which this course is offered : ***level 10/ year 5***			
7 - Pre-requisites for this course (if any) : • **CE 419**			
8 - Co-requisites for this course (if any) : • **Non**			
9 - Location if not on main campus **:** ***(Building opposite Majmaah Governorate)***			
10 - Mode of Instruction (mark all that apply)			
A - Traditional classroom	√	What percentage?	**70 %**
B - Blended (traditional and online)	√	What percentage?	**10 %**
D - e-learning	√	What percentage?	**10 %**
E - Correspondence		What percentage?	**……. %**
F - Other	√	What percentage?	**10 %**
Comments : ***The course involves Lectures and exercises parts, teaching these two parts depends on explaining, reports, home works and assignments.***			

B Objectives

What is the main purpose for this course?

- Drawing and reading the architectural drawings including plans, views and sections (axis definition, walls, doors, windows and other notations).
- Preparing structural drawings of basement floor, repeated floor and final floor:
  - a- Beams and slabs sheets (dimensions and reinforcement).
  - b- Columns and axis sheets (dimensions and reinforcement).
  - c- Foundations sheet (dimensions and reinforcement).
  - d- Ladders sheet (dimensions and reinforcement).
  - e- Plumping sheet (water supply and waste water drainage).
  - f- Electrical sheet.
- Building laws and acts, municipalities' requirements.
- Reading the soil mechanics report.
- Cost estimating of engineering projects.

- Dealing with insulation materials in building construction.

Briefly describe any plans for developing and improving the course that are being implemented :

- Course delivery by citing real life examples and problems
- Emphasis on understanding concepts and illustrating applications to problems
- Solving problems through assignment on each topic
- Background materials from the books are provided
- Extensive interaction with students

C. Course Description

1. Topics to be covered

List of Topics	No. of Weeks	Contact Hours
Building structures, main buildings elements, engineering drawings required in design and implementation stages.	4	16
Reading and analysing architectural drawings.	2	8
Midterm-I	0.5	2
Reviewing studies and research work about engineering projects such as economic studies, soil and water research, etc.	4	16
Midterm-II	0.5	2
Studying some building elements as ladders, beams	1	4
Insulation materials in buildings.	2	8
Final Exam	1	4
Total	15	60

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	45	15	0			60
Credit	3	0	0			3

3. Additional private study/learning hours expected for students per week.

3-4

3-4 hours per week on an average for self-study and problem solving

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Read architectural drawings in fine details enabling him to translate it to actual construction.	– Course delivery by citing real life examples and problems. – Emphasis on understanding concepts and illustrating applications to problems. – Placing before the class mind provoking and thinking questions.	• Regularly asking questions on different topics and concepts. • Midterm and End-semester tests that will force the student to think and apply the knowledge. • Reports and discussions.
1.2	Understand the intricacies of construction of typical elements in buildings.		
1.3	To become familiar with building laws and acts, and municipalities requirements		
1.4	Understand how to read the soil mechanics report.		
1.5	Be able to apply different methods of cost estimating in civil engineering projects.		
1.6	Be able to deal with insulation materials.		
2.0	**Cognitive Skills**		
2.1	Explaining fundamentals with live / day to day problems	- Solving problems through assignments on each topic. - Assignment problems, Exercise / tutorial problems for applications that will force the students to think and apply the knowledge gained. - Asking to students to	• Asking the student to solve the problems on white board guiding him when required. • Quizzes and Exams. • Asking students to participate in oral discussion during the class. • Setting assignment problems or mini project which will apply principles and concepts. • Questions in Quiz, Midterm and End semester tests which will force the student to think and
2.2	Problems solving – Sample problems and exercise problems		
2.3	Interactive problem solving through well define, planned and searching questions		
2.4	Assignment problems for applications		
2.5			
2.6			

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
		suggest a solution before giving them the correct answer. - Asking the students to explain the steps adopted in the problem and ensures that they understand the problem. - Asking searching questions on topic fundamentals. - Setting M-1 and M-2 + quizzes and mini projects so that students can apply the knowledge gained.	apply concepts and principles learnt.
3.0	**Interpersonal Skills & Responsibility**		
3.1	Help the student to solve the problem by asking questions during the office hours.	- Solve the problems by asking sequential questions. - Paying personal attention to each student and caring about his situation.	• Group work in laboratory work and team activity. • Bonus marks to those who are improving and participating effectively in the class.
3.2	Different access to the student to be close with the teacher using, email, website and even phone calls in urgent.		
3.3			
3.4			
3.5			
3.6			
4.0	**Communication, Information Technology, Numerical**		
4.1	Developing the computer skills in preparing presentation.	- Asking students to solve problems in	• Discussion, Questioning during topics. • Highlighting the
4.2	Developing the communication skills through interactive discussing during the seminar		
4.3	Students have to be familiar with using the modern		

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
	information technology such as interment, and smart board.	the class by guiding him.	concepts and principles through real life problems • Asking the students to solve the numerical part and check that the answers are tallying with notes. • Asking the students to participate in evaluating their mates.
4.4			
4.5			
4.6			
5.0	**Psychomotor**		
		-	•
5.2			
5.3			
5.4			
5.5			
5.6			

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	First midterm exam	7	15
2	Second exam	12	15
3	Quiz, Exercise questions and participation		10
4	Homework, Report, Project and assignments		10
5	Tutorials		10
6	Final Exam	15	40
7	Total		**100**
8			

D. Student Academic Counseling and Support

Every day one hour is marked as Office Hour in the Time Table of teaching staff. During this hour the students can consult the teacher individually on a one to one basis for academic advice. In all, teaching staff is available for more than 7 hours per week for academic advice beyond lectures and tutorials.

E. Learning Resources

1. List Required Textbooks :

- Francis D.K. Ching, "Building Construction Illustrated", John Willy & Sons, (Latest edition).

2. List Essential References Materials :

- Merritt, F.S., Rickatts, J.T., "Building Design and Construction Handbook", McGraw- Hill, (Latest edition).

3. List Recommended Textbooks and Reference Material :

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4. List Electronic Materials :

- Selected Papers, and video clips from U-tube and trustable web sites.

5. Other learning material :

- Seeking building construction software's.

F. Facilities Required

1. Accommodation

- Lecture room available – (25 students/class) to avoid student movement. It is necessary to keep lectures for one course / level in the same classroom.

2. Computing resources

- Available for students in the computer labs. Better to add more in other areas so the students can use them during the break time.

3. Other resources

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G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- Importance of feedback should be first explained. Only then the feedback should be taken.
- Have a question as to how the teaching can be improved – speed, more problems etc. Still we depend on the evaluation of previous semesters. However, I intend to do assessment at the middle of each semester.

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- Ask the students if the speed of teaching and the approach is helping the students in learning the subject.
- Students are free to report any difficulties to the Head of the department.

3 Processes for Improvement of Teaching :

- Review of strategy of at the mid-semester after assessment of M-1 answer papers.
- Group discussion and using different ways in teaching (white board, seminars, Power point, reading, conducting lab works, etc…)

4. Processes for Verifying Standards of Student Achievement

- Independent checking of End-Semester assessment (another faculty member)
- Checking of course files by the Quality Centre Nominee and give suggestions for improvement in writing.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

- Mid Semester review of Course files.
- End Semester review of Course files.
- Student feedback at end of the semester.
- Feedback of the assessment at the beginning of the next semester.
- Departmental meeting at the beginning of the next semester on improvements suggested.

Course Specification Approved
Department Official Meeting No (11) Date 10 / 05 / 1437 *H*

Course Coordinator		Department Head	
Name :	**Dr. Amjad Khabaz**	***Name :***	Dr. Abdullah AlShehri
Signature :	*Amjad*	***Signature :***	*AlShehri*
Date :	22/ 04 / 1437 *H*	***Date :***	10/ 05 / 1437 *H*