Course Specification

(Bachelor)

Course Title:	Construction Project Management
Course Code:	COE3401
Program:	Bachelor of Construction Engineering
Department:	Civil and Environmental Engineering Department
College:	College of Engineering and Computing in Al-Qunfudhah
Institution:	Umm Al-Qura University
Version:	4th
Last Revision Date:	15th January 2025

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A. General information about the course:

1. Course Identification

1. Credit hours: (2)					
2. Course type					
A.	☐University	☐ College	☒ Department	☐Track	Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (Level 5/year 3)					
4. Course General Description:					
The "Construction Project Management" course is critical for students undertaking a Bachelor's degree in Construction Engineering. It provides a comprehensive view of managing construction projects from inception to completion. This course covers the fundamental principles and practices necessary for the effective administration of construction projects, including planning, execution, monitoring, and closing. Students will learn about project lifecycle phases, the roles and responsibilities of a construction manager, and the application of project management tools and techniques to ensure project success.					
5. Pre-requirements for this course (if any)**:**					
Engineering Economy (COE2002)					
6. Co-requisites for this course (if any)**:**					
7. Course Main Objective(s):					
1. To introduce students to the core concepts and processes involved in construction project management. 2. To equip students with skills to plan, execute, and close construction projects successfully. 3. To familiarize students with project management software and tools used in the construction industry. 4. To develop competency in managing project scope, time, cost, quality, and risk. 5. To enhance students' understanding of construction contracts and stakeholder management.					

6. To study effective communication and leadership skills in the context of project management.
7. To explore strategies for resource allocation and team management.
8. To enable students to anticipate and solve problems that arise during construction projects.
9. To prepare students for real-world project management challenges in the construction industry.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	**2 credit hours**	**100%**
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	**30**
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		**30**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.1	Recall, define, and describe construction engineering concepts, principles, theories, and procedures.	K1	Interactive learning Self-directed learning	Midterm Exam, Final Exam, Homework, and Quizes
1.2	Demonstrate an understanding of the foundational principles of physics, mathematics, and engineering techniques applied in construction engineering.	K2	Interactive learning Self-directed learning	Midterm Exam, Final Exam, Homework, and Quizes
...				
2.0	**Skills**			
2.1	Apply engineering and scientific principles to identify, analyze, and solve complex construction engineering problems.	S1	Interactive learning Self-directed learning	Midterm Exam, Final Exam, Homework, and Quizes
2.2				
...				
3.0	**Values, autonomy, and responsibility**			
3.1				
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Project Management in Construction	2

2.	Project Initiation and Feasibility Studies	4
3.	Project Planning and Scheduling	6
4.	Resource Management and Procurement	6
5.	Cost Management and Budgeting	2
6.	Mid Term Exam	2
7.	Risk Management in Construction Projects	2
8.	Quality Management and Control	2
9.	Leadership and Team Management	2
10.	Project Monitoring, Evaluation, and Closure	2
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quizzes	4, 6, 12	15%
2.	Homework	3, 9, 13	15%
3.	Midterm Exam	8	30%
4.	Final Exam	16 or 17	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Sears, S.K., Sears, G.A., Clough, R.H. and Rounds, J.L., 2020. *Construction Project Management: A Practical Guide to Field Construction Management*. 7th ed. Hoboken: Wiley.
Supportive References	Hendrickson, C. and Au, T., 2020. *Project Management for Construction*. 2nd ed. [eBook] Available at: https://www.cmu.edu/cee/projects/PMbook/.
Electronic Materials	Hendrickson, C. and Au, T., 2020. *Project Management for Construction*. 2nd ed. [eBook] Available at: https://www.cmu.edu/cee/projects/PMbook/.
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	**Classroom with minimum capacity of 30 students**
Technology equipment (projector, smart board, software)	**Projector, whiteboard**
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Lecturer / Students	Direct / Indirect (Grades, surveys)
Effectiveness of Students assessment	Faculty	Indirect (Barriers to understand successor course)
Quality of learning resources	Lecturer	Direct (Grades)
The extent to which CLOs have been achieved	Lecturer / Faculty	Direct (Grades)
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**Civil and Environmental Engineering Department Council in Al-Qunfudah**
REFERENCE NO.	**The fifteenth session of the academic year 1446**
DATE	**01/05/2025**