

## Course Description Form

<b>1. Course Name:</b>	
Method of Construction and Estimation	
<b>2. Course Code:</b>	
WCV-42-08	
<b>3. Semester / Year:</b>	
Second semester /2024-2025	
<b>4. Description Preparation Date:</b>	
23 / 9 / 2024	
<b>5. Available Attendance Forms:</b>	
Students that are interested in learning	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
3 hours per week / number of units (2 units)	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Name: assist lecturer Ghadeer Haitham Hassan <a href="mailto:ghadeer.haitham@uowa.edu.iq">mailto:ghadeer.haitham@uowa.edu.iq</a>	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1. Understanding of cost and its types.</li> <li>2. Illustrating funding requirements.</li> <li>3. Understand construction phases and project life cycle.</li> <li>4. Learning planning sciences in construction industry.</li> <li>5. Familiarize students to basic concepts of construction equipment's productivity.</li> <li>6. To understand resource allocation and how pre-plan labor requirements scheduling.</li> <li>7. To prepare construction projects' Bill of quantities.</li> <li>8. Definition general conditions for works of civil engineering.</li> </ol>
<b>9. Teaching and Learning Strategies</b>	
<b>Strategy</b>	<ol style="list-style-type: none"> <li>1. Providing a comprehensive introduction to each study topic and connecting the current topic to previous ones .</li> <li>2. Delivering theoretical lectures</li> <li>3. Presenting short scientific films .</li> <li>4. Providing and explaining sufficient examples.</li> </ol>

5. Conducting experiments in the road laboratory.  
6. Using brainstorming to convey the material

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	6		Introduction		
2-6	24		Construction equipment		1. Participation within the classroom.
6-10	24		The cost of owning and operating construction equipment		2. Short written tests.
10-15	30		Engineering fundamentals		3. Discussion and dialogue with students .
15-20	30		Earth work equipment		4. Assigning homework at the end of each topic.
20-25	30		Soil stabilization and compaction		5. Presenting posters about some road problems and their solutions .
25-30	30		Equipment for production and transportation of concrete		6. Attendance .
			Forms for concrete structures		7. Monthly written exams.
			Calculation of construction materials quantity	1. Providing a comprehensive introduction to each study topic and connecting the current topic to previous ones .	8. Final semester exam.
			Quantities of construction materials	2. Delivering theoretical lectures .	
			Calculation of the steel reinforcement quantity in concrete	3. Presenting short scientific films .	
			Bill of quantities, and calculating of construction works	4. Providing and explaining sufficient examples .	

## 10. Course Evaluation

1. Participation within the classroom 2%.
2. Short written tests 3%.
3. Assigning homework at the end of each topic 5%.
4. Attendance 5%.
5. Monthly written exams 35%.
6. Final semester exam 50%.

## 11. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Guessing - Medhat Fadil - University of Baghdad Construction Planning, Equipment , and Methods ( L. Peurifoy) Estimating in Building Construction (J. Peterson and R. Dagostion) Estimating and tendering for construction work (Martin Brook)
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

