MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Building Materials**			**Module Delivery**	
Module Type	**S**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CIV001**				
ECTS Credits	**7**				
SWL (hr/sem)	**175**				
Module Level		UGI	**Semester of Delivery**		1
Administering Department		CV101	**College**	Civil Engineering College	
Module Leader	Asst. Prof. Mohammed H. Mohana		**e-mail**	Mhm1961mhm@uoanbar.edu.iq	
Module Leader's Acad. Title		Assistant Professor	**Module Leader's Qualification**		Ph.D.
Module Tutor	Alhareth M. Abdulghafoor		**e-mail**	Alharethmuthanna88@uoanbar.edu.iq	
Peer Reviewer Name			**e-mail**	E-mail	
Scientific Committee Approval Date		01/06/2023	**Version Number**		1.0

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	1. understand compositions, engineering behaviors, and design methods of various civil engineering materials, including steel; Wood, soil, aggregate, Portland cement concrete, and asphalt cement concrete. 2. Evaluation of material performance under applied loads for engineering applications Apply these concepts to design and analyze structural members like beams and columns. 3. Physical properties of concrete, metals, plastics and wood.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. learn about the various materials, both conventional and modern, that are commonly used in civil engineering construction. 2. Identify the criteria for choice of the appropriate materials and the various tests for quality control in the use of these materials. 3. conduct tests for quality control in the use of these materials.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. • **Introduction**: Definitions and reviews, - construction materials: Classification and Select definitions, construction materials: General Requirements, Construction materials: Additional Requirements, Construction materials: Selection of Types [2 hrs] learn about the various materials, both conventional and modern, that are commonly used in civil engineering construction. • Identify the criteria for choice of the appropriate materials and the various tests for quality control in the use of these materials. • Conduct tests for quality control in the use of these materials.
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The subject of construction materials needs effective learning and educational strategy to know the properties of different materials, methods of testing them, methods of developing these materials, and the possibility of updated uses for these materials. The student studying this course should also be familiar with the codes related

	to the specifications required for these materials. The student of this course must also keep up with the continuous updates in the materials codes. The student of this course should have a way of thinking that adopts the use of alternative materials for materials that are not available, environmentally friendly and sustainable materials, advanced and modern materials.

Student Workload (SWL)
الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5.2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6.4
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative Assessment	**Quizzes**	**5**	**25% (25)**	3, 6,10,14	LO #1, 3,5, and 7
	Assignments (HW)	**2**	**5% (5)**	2, 12	LO # 4 and 7
	Report				
	Activities	**1**	**4% (4)**		
	Lab	**1**	**6% (6)**	1,2,3,4,5,6,7,8,9,10 & 11	LO # 1-14
Summative Assessment	**Midterm Exam**	**2 hr**	**10% (10)**	7	LO # 1-7
	Final Exam	**3 hr**	**50%**	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	*Introduction*
Week 2	*Engineering materials.*
Week 3	*Brick, Production of bricks, Testing of brick, Specification of bricks.*
Week 4	*Binding materials, Gypsum, Lime*
Week 5	*Wood, Defects of wood, Uses of wood,*
Week 6	*Cement, Production of cement, Types of cement, Testing of cement,*
Week 7	*Finishing materials, Paints*
Week 8	*Insulating material,*
Week 9	*Tiles*
Week 10	*Metals*
Week 11	*Building stone,*
Week 12	*Glass Building block*
Week 13	*Concrete block*
Week 14	*Sanitary works, Pipes.*
Week 15	*Water, New building materials*
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	***Lab1.*** *Compressive Strength of Brick*
Week 2	***Lab2.*** *Absorption of Brick*
Week 3	***Lab3.*** *Effloresces of Brick*
Week 4	***Lab4.*** *Compressive Strength of Gypsum*
Week 5	***Lab5.*** *Modulus of Rapture of Gypsum*
Week 6	***Lab6.*** *Extension of Gypsum*
Week 7	***Lab7.*** *Standard Consistence of Gypsum*

Week 8	***Lab8.*** *General Shape of Tiles*
Week 9	***Lab9.*** *Modulus of Rapture of Tiles*
Week 10	***Lab10.*** *Compressive Strength of Wood*
Week 11	***Lab11.*** *Tensile Strength of Steel Reinforcement*

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Kenneth N. Derucher, George P. Korfiatis, and A. Samer Ezeldin, Materials for Civil and Highway Engineers, Prentice Hall, 4th ed., 1998.	Yes
Recommended Texts	Laboratory Manual, Compiled by Instructor	Yes
Websites	https://www.uoanbar.edu.iq/Bank-Section.php	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	**A -** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.