

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Building Materials 2		Module Delivery	
Module Type	Core learning activity		☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	CE 104			
ECTS Credits	4			
SSWL (hr/sem)	63			
USSWL (hr/sem)	37			
SWL (hr/sem)	100			
Module Level	1	Semester of Delivery		2
Administering Department	CE	College	Type College Code	
Module Leader	Nahla M. Nori M. Saleem		e-mail	nahla.salim@alnaji-uni.edu.iq
Module Leader's Acad. Title	Professor		Module Leader's Qualification	Ph.D.
Module Tutor			e-mail	nahla.salim@alnaji-uni.edu.iq
Peer Reviewer Name	Nahla M. Nori M. Saleem		e-mail	nahla.salim@alnaji-uni.edu.iq
Scientific Committee Approval Date			Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	CE 103	Semester	2
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	1. Introduce basic definition and explain the basic concepts that essential in connection with materials and illustrate these concepts by examples and tests. 2. Explain the uses of the materials and their applications. 3. Enable the student to analyze the material (chemically and physically). 4. Introduce basic definition and explain the basic concepts of materials available in the local market. 5. Enable the student to perform tests on the studied materials
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Cognitive goals. 1. Define any building materials. 2. Graph basic relationships considering materials properties. 3. Know the raw and ingredients of the materials. 4. Tests materials for basic and most important experiments. 5. Know the standards related to the specifications of the materials. 6. Calculate the mathematic relations for some materials. 7. Specify the quality of good material theoretically and practically. B- The skills goals special to the course. 1. Construction materials test methods. C- Affective and value goals 1. Increasing student's self-confidence to perform his (homework, classwork and assessment) within the corresponding time. 2. Encouraging the teamwork between the students. 3. Cooperating the universal activities. 4. Supporting the extra-curricular university activities and urging students to participate in them. D- personal development 1. Enhancing the skills to perform any significant lab test for different engineering purposes
Indicative Contents المحتويات الإرشادية	Indicative content includes the following: <u>Part A</u> Introduction of Construction Materials Science. [12 hrs] <u>Part B</u> Bonding Material. [20 hrs] <u>Part C</u> Bricks. [20 hrs] <u>Part D</u> Blocks. [16 hrs] <u>Part E</u> Tiles. [16 hrs] <u>Part F</u> Timber. [16 hrs] <u>Part G</u> Metal. [16 hrs] <u>Part H</u> Nano-Materials. [4 hrs]

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	The main adopted strategy in delivering this module, encourage students' participation in the exercises, refining and expanding their critical thinking skills comprised: 1. Lectures. 2. Tutorials. 3. Homework and Assignments. 4. Lab. Experiments. 5. Tests and Exams. 6. In-Class Questions and Discussions. 7. Connection between Theory and Application. 8. Field Trips. 9. Extracurricular Activities. 10. Seminars. 11. In- and Out-Class oral conservations. 12. Preparing reports about the lab tests.
-------------------	---

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	63	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	37	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	2.5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	1	10% (10)	4,8,12 and 14	LO #A, #B and #C
	Home work	1	10% (10)	4,8,12 and 14	LO #A, #B and #C
	Seminar.	1	10% (10)	4,7,9,11 and 13	LO #B and #D
	Laboratory	1	10% (10)	4,7,9,11 and 13	LO #B and #D
Summative assessment	Midterm Exam	2hr	10% (10)	9	LO #A, #B and #C
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Blocks Introduction- Types of blocks
Week 2	Manufactures of blocks
Week 3	Uses of blocks a. Solid blocks b. Hollow blocks c. Itonic blocks d. Thermal blocks e. Glass blocks f. Hourdy blocks
Week 4	Midterm Exam + Tiles Introduction
Week 5	Classifications, types and uses of tiles
Week 6	Characteristics of good tiles
Week 7	Manufacture of Tiles
Week 8	Tile tests
Week 9	Timber Classification of trees Seasoning in wood Methods of wood seasoning
Week 10	Natural defects in timber Artificial defects in timber
Week 11	Mechanical properties of woods Strength and moisture in wood

Week 12	Timber defects a. Shrinkage in timber b. Warping in timber c. Checking in timber
Week 13	Metal Properties of metals Classification of steel due to carbon content High carbon steel/ properties & uses Low carbon steel/ properties & uses factors affecting steel properties heat treatment of steel
Week 14	Low carbon steel/ properties and uses factors affecting steel properties heat treatment of steel
Week 15	<u>Nano-Materials</u>
Week 16	A preparatory week before the Final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Blocks Blocks dimension test
Week 2	Blocks absorption test
Week 3	Blocks compressive strength test
Week 4	Block exam
Week 5	report submission and results discussion
Week 6	<u>Tiles</u> Tile dimension test
Week 7	Tile face absorption test
Week 8	Tile total absorption test
Week 9	Tile abrasion test
Week 10	Tile exam
Week 11	report submission and results discussion
Week 12	<u>Timber</u> Timber compressive strength test
Week 13	Timber flexural strength test
Week 14	Timber exam
Week 15	report submission and results discussion
Week 16	A preparatory week before the Final Exam

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	-	-
Recommended Texts	Construction materials by zuhair Sakoo I.Q.S. for all the materials used in the semester Construction materials by zuhair Sakoo	No
Websites	-	

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.