

MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information					
معلومات المادة الدراسية					
Module Title	ENGINEERING GEOLOGY			Module Delivery	
Module Type	BASIC			Theory Lecture Tutorial	
Module Code	UOMU023023				
ECTS Credits	3				
SWL (hr/sem)	75				
Module Level	1		Semester of Delivery	2	
Administering Department	Building and construction techniques		College	Al-Mustaqbal university	
Module Leader	Tamar Maitham Al-Asedi		e-mail	Tamar.Maitham.Abdulwahabb@uomus.edu.iq	
Module Leader's Acad. Title	Assistant Lecturer		Module Leader's Qualification		
Module Tutor	None		e-mail	None	
Peer Reviewer Name			e-mail		
Review Committee Approval	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	1- The study aims to know the earth's crust and its mineral and physical		

أهداف المادة الدراسية	<p>properties.</p> <p>2. Classification of sedimentary and metamorphic rock species.</p> <p>3. Stabilization of rocky slopes and their impact on buildings.</p> <p>4. The effect of weathering on structures and the factors affecting them.</p> <p>5. Soil formation factors and their engineering properties</p> <p>6- Geological structure of the characteristics of rock strata</p> <p>7- The study aims to know surface and groundwater and its impact on the work site</p> <p>8- Dams, tunnels and loads above them</p>
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<p>1-. He has the ability to know the types of rocks on which buildings arise.</p> <p>2- He has the ability to know the types of rocks, their degree of hardness and what they bear from the facility built on it.</p> <p>3- Have the knowledge to face the problem of surface and groundwater and its impact on buildings</p> <p>4- Be able to treat slopes and their impact on nearby buildings</p>
Indicative Contents المحتويات الإرشادية	<p>Indicative content includes the following.</p> <p>1-Distinguishing between species of terrestrial rocks on which buildings are created</p> <p>2- Identify and study slopes well and how they affect nearby constructions</p> <p>3- Identify the geological structure of dams and their future impacts</p> <p>4- Studying the soil with its different tissues and the surface or groundwater it contains and its future impact on the structure coming</p>
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<p>The student will be able to gain the information about the earth materials (soils , rocks) , their minerals, properties, and their engineering applications. Also the student will learn the effect of soils and rocks foundations on the stability of structures</p>

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem)	33	Structured SWL (h/w)	33/15=2.2

الحمل الدراسي المنتظم للطالب خلال الفصل		الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	42	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	42/15=2.8
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	75		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab. Report	1	10% (10)	Continuous	
		1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	1.5 hr	10% (10)	7	LO # 1-7
	Final Exam	3 hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الأسبوعي النظري	
	Material Covered
Week	Syllabus
1	Introduction to the earth science, crust and interior of the earth and Minerals and physical properties
2	Factors effecting on the mineral physical properties and Mineral classification
3	Clay minerals, Minerals Expansive soil and Rocks, Classification of rocks ,igneous rocks
4	Sedimentary rocks, classification of sedimentary rocks
5	Metamorphic rocks, Stabilization of rock slopes
6+7	An engineering classification of rock materials , Weathering and erosion, weathering agents on structures
8	Soil, Soil profile, Soil forming processes and Properties of engineering soil , Properties of engineering rocks and Geological structure , Dipping layer
9+10	Folds, Conformities and Disconformities and Faults, Joints, Effect of Faults and Joints on structures, and Surface water and underground water and Site investigation
11	Dams and tunnels, Type of Dams, loads on Dams, Classification of tunnels and nomenclature, Construction of tunnels

12	Mass movement, causes of mass movement,
13	classification of mass movement, creep, creep causes and treatment, landslides
14+15	causes of landslides, Earthquake due to landslides and Geological investigation, Geophysical investigation Geological sites of reservoirs, Ground reservoirs, Underground reservoirs
Week 16	Final Exam

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	1- Plummer C., Diane H., 2007, " Physical Geology", Mc-Graw Hill, Eleventh edition 2- ن . دنكان . ترجمة كنانة محمد ثابت, ١٩٨٠, "الجيولوجيا الهندسية وميكانيك الصخور", المكتبة الوطنية بغداد	No
Recommended Texts	1. كنانة محمد ثابت & محمد عمر العشو, ١٩٩٣ "أسس الجيولوجيا للمهندسين", الموصل , جامعة الموصل	No
Websites		

APPENDIX:

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	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note:

NB 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.

ملاحظة: هذا النموذج تم وضعه وتقديمه من قبل مديرية ضمان الجودة في وزارة التعليم العالي والبحث العلمي