



Module (Course Syllabus) Catalogue

2023-2024

College/ Institute	Erbil Polytechnic University	
Department	Highway Engineering Technique Department	
Module Name	Engineering Geology	
Module Code	ENG405	
Degree	Technical Diploma <input type="checkbox"/> Bachelor <input checked="" type="checkbox"/> High Diploma <input type="checkbox"/> Master <input type="checkbox"/> PhD <input type="checkbox"/>	
Semester	4 th	
Qualification	M.Sc. Structural Engineering	
Scientific Title	Assistant Lecturer	
ECTS (Credits)	6	
Module type	Prerequisite <input type="checkbox"/> Core <input checked="" type="checkbox"/> Assist. <input type="checkbox"/>	
Weekly hours	4 hours	
Weekly hours (Theory)	(4) hr Class	(132.5) Total hrs Workload
Weekly hours (Practical)	(None)hr Class	(None)Total hrs Workload
Number of Weeks	12	
Lecturer (Theory)	HUNAR ISSA	
E-Mail & Mobile NO.	hunar.omer@epu.edu.iq – 07504487577	
Lecturer (Practical)	None	
E-Mail & Mobile NO.		
Websites		

Course Book

<p>Course Description</p>	<p>This course explores the fundamentals of geology applied to civil engineering problems. Topics include rock and mineral types, soil properties, rock mechanics, geologic structures, active tectonics and earthquake hazards, slope stability and landslides, groundwater, rivers and flood hazards.</p>				
<p>Course objectives</p>					
<p>Student's obligation</p>	<p>a. To attend the classes regularly with minimum absence. b. To participate actively in the class discussion and Q&A session. c. Study on daily basis to digest the class material d. To write note off-handouts e. Prepared for sudden Quizzes f. Vet through the references provided by the lecturer and to solve as much as possible of homework and exercises for the subjective materials. g. Prepare the assignment and the seminar as instructed by the lecture. h. Solve and submit the home works on time. i. Prepare and submit the requested scientific reports on time to the standards set by the lecturer. j. Prepare and present seminars in the number required for the titled assigned by the lecturer. k. Prepare for and attend the mid – terms exam l. Prepare for and attend the final – exam</p>				
<p>Required Learning Materials</p>	<p>Students at this stage with the workload assigned technical for the subject are not required to scatter their attention with bunch of sources. Students are encouraged to thoroughly study the reference given by the lecturer and to vet through available cyber data related to the subject and this shall include the concrete technology worked examples and all those are support with construction site visit for the students to appreciate and monitor closely the application of the theoretical concept in construction.</p>				
<p>Evaluation</p>	<p>Task</p>	<p>Weight (Marks)</p>	<p>Due Week</p>	<p>Relevant Learning Outcome</p>	
	<p>Paper Review</p>		<p>None for B.SC.</p>		
	<p>Assigments</p>	<p>Homework</p>	<p>10</p>	<p>Weekly</p>	<p>Application for subject by subject</p>
<p>Class Activity</p>		<p>2</p>	<p>Weekly</p>	<p>Participate in syllabus learning</p>	

	Report	8	4 th & 8 th	Concentrate on certain subject of the module and cover its technical aspects
	Seminar	8	6 th & 10 th	Individual or in group for subjects within the module but out of the syllabus
	Essay			
	Project			
	Quiz	8		
	Lab.			
	Midterm Exam	24	7 th	
	Final Exam	40	14 th & 15 th	
	Total	100		
Specific learning outcome:				
Course References:				
Course topics (Theory)		Weeks		
1. Engineering Geology and earth crust		1 st		
2. Minerals		2 nd & 3 rd		
3. Factors affecting earth crust		4 th		
4. Rocks, Types and Characteristics		5 th & 6 th		
5. Physical and engineering properties of rocks		7 th		
6. Soils, origin and Characteristics		8 th & 9 th		
7. Physical and engineering properties of soils		10 th & 11 th		
8. Internal and external stresses in soils		12 th		
9. Geological Maps		13 th		
10. Contour Maps		14 th		
11. Geophysical Investigations		15 th		
Questions Example Design				
First year teaching, no questions example yet				
Extra notes:				
None so far				

External Evaluator