

Course Description Form

1. Course Name:					
Hydrogeology					
2. Course Code:					
3. Semester / Year:					
Semester					
4. Description Preparation Date:					
30/3/2024					
5. Available Attendance Forms:					
Only attendance					
6. Number of Credit Hours (Total) / Number of Units (Total)					
60hours					
7. Course administrator's name (mention all, if more than one name)					
Name: Esraa A. Mandhour Email: esra.mandhour@sci.utq.edu.iq					
8. Course Objectives					
Course Objectives			Understand the basic principles hydrogeology and its applications		
9. Teaching and Learning Strategies					
Strategy		1- Educational strategy, collaborative conce planning. 2- Brainstorming education strategy. 3- Education Strategy Notes Series			
10. Course Structure					
W e e k	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Eva luati on met hod
1					
2					
3					
4					
5					
6					

7					
8					
9					
10					
11					
12					
13					
14					
15					
Holi					
16	2theoretical+2practic		1-Introduction, definition of hydrogeology, its importance and applications	Explaining theoretical and practical concepts through lectures	Exams through weekly quick exams, monthly written exams, reports, research and end-of-year exam.
17	1		2-The precipitation	using methods to learn the basic principles and practical aspects of hydrogeology.	
18	2theoretical+2practic	teaching the students basic basic principles of hydrology, its importance and applications	3-Evaporation		
19	1	teaching the students how to calculate precipitation	4- infiltration		
20	2theoretical+2practic	Introducing the student to the methods of calculating withdrawals from precipitation	5-runoff		
21	1	The student learns about methods of calculating infiltration	First exam		
22	2theoretical+2practic	Knowing the trend and the factors affecting it	7- Hydrograph		
23	1	The student learns about the importance of groundwater, its distribution, types of groundwater wells, and groundwater movement.	8- Hydrograph		
24	2theoretical+2practic		9- Floods		
25	1		10- Floods follow		
26	2theoretical+2practic		11- Groundwater, its importance and distribution		
27	1		12- Groundwater movement		
28	2theoretical+2practic		13- Well hydraulics		
29	1		Second exam		
30	exam				
11. Course Evaluation					
The distribution of grades is as follows: 35 marks for monthly and daily exams and reports for the theoretical aspect and 15 marks for monthly and daily exams for the practical aspect.					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			Ward, R.C & Robinson (1990): Principles of hydrology McGraw-Hill. London.		
Main references (sources)			Engineering Hydrology ,Second Edition Mc Graw hill ,New Delhi,K.Subramanya,1997. Linsely,R.K.,M.A.KohlerandPaulhus ,J.L.;"Hydrology for Engineers McGraw-Hill,Singapore,1988.		
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

