

## Course Description Form

1. Course Name:	
Irrigation Engineering	
2. Course Code:	
CE316	
3. Semester / Year:	
Semester system	
4. Description Preparation Date:	
2024-9-24	
5. Available Attendance Forms:	
presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Total number of hours (48) (32 theoretical hours - 16 Tutorial) Number of units 2	
7. Course administrator's name (mention all, if more than one name)	
Name: Zainab Neam GHazi Email: <a href="mailto:zainab2017engineer@gmail.com">zainab2017engineer@gmail.com</a>	
8. Course Objectives	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>1-Introducing students to the principles of irrigation and drainage engineering</li> <li>2-Introducing students to the basics used in the field of designing irrigation networks and drainage networks</li> <li>3- Definition of the relationship between the Persian Empire</li> <li>3- Identify the mathematical relationships related to water consumption</li> <li>5-Identify the different methods</li> </ul>
9. Teaching and Learning Strategies	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>1 Arouse the student’s curiosity about the nature of irrigation and drainage engineering</li> <li>2. How to use various topics as a basis for the process of designing narrative channels</li> <li>3. Linking the theoretical side with the practical side a transferring students’ minds to realistic applications</li> </ul>

10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Introduction in Irrigation and drainage:	Irrigation Engineering	presence	Daily and monthly tests
2-3	6	Soil and water:	Irrigation Engineering	presence	Daily and monthly tests
4-6	9	Irrigation water:	Irrigation Engineering	presence	Daily and
7-8	6	Infiltration and Intake:	Irrigation Engineering	presence	monthly tests
9	3	Methods of irrigation:	Irrigation Engineering	presence	Daily and
10	3	Border Irrigation:	Irrigation Engineering	presence	monthly tests
11	3	furrow Irrigation:	Irrigation Engineering	presence	Daily and
12	3	Basin Irrigation:	Irrigation Engineering	presence	monthly tests
13-16	9	sprinkler and trickle Irrigation:	Irrigation Engineering	presence	Daily and
11. Course Evaluation					
10 marks (daily preparation, daily and oral exams, homework, and class activities)					
30 marks (monthly exams)					
60 marks (final exam)					
12. Learning and Teaching Resources					
Main references (sources)			Michael A. M., "Irrigation Theory and ,Practice" Vikas Publishing House New Deh 1981. Chow , V.T. "Open Channel Hydraulics", McGraw-Hill company ,1973.		

Recommended books and references (scientific journals, reports...)	Waller,P., Yitayew,M. "Irrigation and Drainage Engineering" Springer International Publishing, 2016
Electronic References, Websites	Luthin J.N. "Drainage Engineering", Wiley Eastern Private Limited , New Delhi 1970 The university's official website, whose address is <a href="https://elearning.uowa.edu.iq">https://elearning.uowa.edu.iq</a>

