

Course Description Form

1. Course Name:	
Irrigation & drainage engineering	
2. Course Code:	
Irrigation & drainage engineering II	
3. Semester / Year:	
2023-2024 (Semester)	
4. Description Preparation Date:	
20/3/2024	
5. Available Attendance Forms:	
Students who are regularly studying	
6. Number of Credit Hours (Total) / Number of Units (Total)	
120 hours/4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Asst. Lect. Saja Ali	
Email: saja.a@uow.edu.iq	
8. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> • 1. Introducing students to the principles of irrigation and drainage engineering • 2. Introducing students to the basics that are adopted in the field of designing irrigation networks and drainage networks • 3. Definition of the relationship between soil and water • 4. Identify the mathematical relationships related to water consumption • 6. Learn about different irrigation methods
9. Teaching and Learning Strategies	
Strategy	<p>Arouse the student's curiosity about the nature of irrigation and drainage engineering.</p> <p>2. How to use various topics as a basis for the process of designing narrative channels.</p> <p>3. Linking the theoretical side with the practical side and transferring students' minds to realistic applications.</p>

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-5	20	Introducing students to the basic principles of irrigation and drainage engineering, as well as the relationship between water and soil, and also identifying water consumption	Introduction, Soil and water ,Consumptive use	Theoretical + Practical	1.homeworks 2.cours exam 3.Quiz
6-10	20	Identify water consumption and requirements Irrigation, irrigation efficiency and infiltration	consumptive use, Irrigation requirements and efficiencies, Infiltration and intake		
11-15	20	Identify the different irrigation methods and how Use these methods	Methods of irrigation		
16-20	20	Knowledge of irrigation by border and methods Design and knowledge of irrigation with furrow And a design method	Border irrigation Furrow irrigation		
21-25	20	Knowing the nature and method of designing each irrigation In basins, sprinkler irrigation	Basin Irrigation Sprinkler Irrigation.		

26-30	20	Knowing how to design irrigation and drainage networks According to the natural levels of the land As well as knowing the appropriate drainage methods for each area according to its topography	Networks of irrigation and Drainage engineering	Theoretical + Practical	1.homeworks 2.cours exam 3.Quiz
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11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Michael A. M., "Irrigation Theory and Practice" Vikas Publishing House New Delhi, 1981. Chow , V.T. "Open Channel Hydraulics" McGraw-Hill company ,1973.
Main references (sources)	Waller,P., Yitayew,M. "Irrigation and Drainage Engineering" Springer International Publishing, 2016
Recommended books and references (scientific journals, reports...)	Luthin J.N. "Drainage Engineering", Wiley Eastern Private Limited , New Delhi 1971
Electronic References, Websites	The university's official website, whose address is https://elearning.uowa.edu.iq

