

Republic of Iraq
The Ministry of Higher
Education
& Scientific Research

بسم الله الرحمن الرحيم



University: Diyala
College: Agriculture
Department: soil science and
water resources
Stage: Third
Lecturer name: Mohammed Ali
Abood
Qualification: Ph.D
Place of work: soil science and
water resources

Flow up of implementation celli pass play

Course Instructor	Mohammed Ali Abood				
E-mail	Mohammed.Ali.Abood@uodiyala.edu.iq				
Title	Irrigation				
Course Coordinator	First				
Course Objective	Science irrigation looking in irrigation water sources and methods to control it, exploit and delivery of agricultural fields and includes planning, design and implementation of irrigation facilities, transmission and distribution of irrigation water and to study ways to add them and calculate the water requirement of the plant through the study of water relationship, soil and climate in addition to the study of problems related to the addition of water problems to salinity and drainage and reclamation of soils.				
Course Description	Irrigation material includes teaching students how to calculate the channels discharge, whether or not lined or exposed as well as the water needs of the plant as well as the expense of transporting and distributing water to agricultural fields without any water losses as well as the expense of the ability of the pumps that transfer water from the rivers and down to the agricultural fields.				
Textbook	Irrigation, Basics and applications, by Dr. Nabil Ibrahim Al-Tayef and Dr. Issam Khudair Hamza Al-Hadithi, 1988, Ministry of Higher Education and Scientific Research - University of Baghdad				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	(20%)	(15%)	(5%)	-	(60%)
General Notes	None				

Course weekly Outline

week	Date	Topics Covered	Practical Part
1	2022/10/2	The concept of irrigation, irrigation and spread	Surveying of the ground and draw a contour map
2	2022/10/9	Irrigation water sources	Measurement of water levels and calculate the amount of excavation and backfill for irrigation channel
3	2022/10/16	irrigation water quality	Measurement of soil moisture
4	2022/10/23	Soil physical properties associated with irrigation	Measurement of water in different ways. float, weirs, orifice , Parshall flume, discharge of pumps.
5	2022/10/30	Relationship with soil water, soil moisture constants, the movement of water in the soil, water infiltration	Measurement of water infiltration
6	2022/11/6	Measurement of water	Applications in calculating of water consumption. CropWat application program in calculating ET ₀
7	2022/11/13	Water consumption of the plant	Crop coefficient
8	2022/11/20	Water requirements and irrigation scheduling	Applications of calculating the water requirement of the plant
9	2022/11/27	Transmission and distribution of irrigation water	Applications in calculating the amount of water and irrigation intervals
10	2022/12/4	The movement of water in the pipes and open channels	Applications in the adequacy and efficiency and consistency of irrigation water distribution calculate
11	2022/12/11	Design of irrigation chanals and dirt lining	Design channels: an irrigation chanal dirt
12	2022/12/18	Adequacy, efficiency and consistency of irrigation	Coated Irrigation chanal
13	2022/12/25	conventional methods of irrigation and Modern irrigation methods	Calculate of the capacity of the pumps

Mohammed A. Abood

Instructor Signature:

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