

Course Description Form

1. Course Name: Land cultivation		
Land Cultivation		
2. Course Code:		
LACU461		
3. Semester / Year:		
First Semester (Autumn) / 2024-2025		
4. Description Preparation Date:		
1/9/2024		
5. Available Attendance Forms:		
Presence + online		
6. Number of Credit Hours (Total) / Number of Units (Total):		
(2 theoretical + 3 practical = 5 hours) × 15 weeks = 75 hours / 3.5 units		
7. Course administrator's name (mention all, if more than one name)		
Lecturer dr. Dheyaa Fathi Aljuburi Practical Instructor: Abdullah Khadir Muhammad	Email: dfhrdheyaa@uomosul.edu.iq abdullah.khder79@uomosul.edu.iq	
8. Course Objectives		
Course Objectives (theoretical) 1- Enabling the student to understand and assimilate the scientific material of the program in terms of understanding, memorization, analysis, and synthesis, while acquiring practical skills in identification, diagnosis, and discrimination, and providing the student with theoretical information on how to follow modern methods of land cultivation. 2- Identify the mechanism of salinity damage to plants. 3- Identify the factors for increasing productivity in field crop fields..	(practical) 1- Learn about farming methods. 2- Learn about the effects of salinity on agricultural crops. 3- Learn about irrigation methods.	
9. Teaching and Learning Strategies		
Strategy	(theoretical) Interactive lecture Brainstorming	(practical) Assignment to team work Assigning tasks and

	<p>Dialogue and discussion</p> <p>Assigning tasks and reporting</p> <p>He is assigned to prepare a report entitled from his diligence</p> <p>It is prepared for discussion with students</p>	reporting
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100Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2Theoretical 3 practical	(theoretical) Known as drought (practical) Enumerates the types of irrigation	(theoretical) Dry farming (practical) Irrigation	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
2	2Theoretical 3 practical	(theoretical) It represents the soil (practical) Shows the effect of salt stress on plant germination and growth	(theoretical) the soil (practical) Salt stress	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning	Short exams, assignment of homework, discussions, student attendance

				tasks and reporting.	
3	2 Theoretical 3 practical	(theoretical) Mention the factors for increasing productivity in field crop fields (practical) Explains farming methods in terms of performance	(theoretical) Factors that increase productivity in fields Crops (practical) Farming methods	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
4	2 Theoretical 3 practical	(theoretical) Enumerates the conditions that must be met by seeds prepared for planting (practical) Shows the environmental factors that affect germination	(theoretical) Agriculture seeds (practical) Germination	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
5	2 Theoretical 3 practical	(theoretical) List the causes of seed	(theoretical) Quality of	(theoretical) Auditory	Short exams,

		<p>damage (practical) Explains the benefits of storing seeds</p>	<p>agricultural seeds (practical) Store seeds</p>	<p>methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.</p>	<p>assignment of homework, discussions, student attendance</p>
6	2 Theoretical 3 practical	<p>(theoretical) Explains the importance of piety (practical) Explains the reasons for the appearance of abnormal signs</p>	<p>(theoretical) Piety (practical) Gestures</p>	<p>(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.</p>	<p>Short exams, assignment of homework, discussions, student attendance</p>
7	2Theoretical 3practical	<p>(theoretical) Shows plants that do not collect salts (practical) Explains the osmotic effect</p>	<p>(theoretical) The nature of salt- tolerant plants (practical) The effect of soil salinity on plant growth</p>	<p>(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue</p>	<p>Short exams, assignment of homework, discussions, student attendance</p>



				style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	
8	2 Theoretical 3 practical	(theoretical) List the methods of nitrogen fixation (practical) Shows symptoms of nitrogen deficiency	(theoretical) Nitrogen element and its fixation (practical) Pictures of nitrogen in the ground agricultural	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
9	2Theoretical 3 practical	(theoretical) Enumerates the steps used to treat stressed ground (practical) Explains methods of adding fertilizers	(theoretical) Types of land defects (practical) Fertilizers - fertilization	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning	Short exams, assignment of homework, discussions, student attendance

				tasks and reporting.	
10	2Theoretical 3 practical	(theoretical) Know the agricultural cycle (practical) It enumerates the conditions that must be met in the thinning process	(theoretical) Agricultural cycle (practical) Patching - cutting - hoeing	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
11	2Theoretical 3 practical	(theoretical) Shows the effective foundations for increasing productivity (practical) Shows the notes that should be taken into account before starting Harvesting process	(theoretical) Post-harvest losses (practical) harvest	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
12	2Theoretical 3 practical	(theoretical) Demonstrates mutual benefit (practical) Demonstrates stillness	(theoretical) Biological factors and their impact on Production and	(theoretical) Auditory methods. Style of writing on	Short exams, assignment of homework,

			distribution of field crops (practical) Dormancy - hibernation	the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	discussions, student attendance
13	2Theoretical 3 practical	(theoretical) Shows crop service operations (practical) Demonstrates the use of agricultural mechanization	(theoretical) Energy expended for service operations (practical) Some processes are used to increase efficiency energy	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
14	2Theoretical 3 practical	(theoretical) Shows the damage caused by salinity to plants (practical) Shows the effect of soil plate on reproduction	(theoretical) Foundations of farming in desert lands (practical) Indirect effects of salts On plants	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class	Short exams, assignment of homework, discussions, student attendance

				Google Classroom. (practical) Assigning tasks and reporting.	
15	2Theoretical 3 practical	(theoretical) Explains land plants according to their classification (practical) Explains the effects of salinity on... Agricultural crops	(theoretical) Agriculture guides (practical) Manifestations of the effect of salinity on Agricultural crops	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance

11.Course Evaluation

	Calendar methods	(Calendar date (week	Degree	Relative weight%
1	Theoretical final report + practical experience reports	theory is 15 weeks	7Theoretical 6 practical	13%
2	Short test Quiz(1)	week (3)	4Theoretical 2 practical	6%
3	Midterm Exam (theoretical and practical)	week (9)	10Theoretical + 5 practical	15%
4	Short test Quiz(2)	week (12)	4Theoretical 2 practical	60%
5	Final practical test	Practical exams week	20%	40%
6	Final theoretical test	theoretical exams	40%	40%

	week		
Total		100%	100%

12. Learning and Teaching Resources


Required textbooks (curricular books, if any)	Land cultivation: Prof. Dr. Medhat Majeed Al-Sahuki.
Main references (sources)	<p>1- Renewable natural resources in arid and semi-arid areas. Year (2005), written by Dr. Atallah Ahmed Abu Hassan and others.</p> <p>2- Breeding crops to withstand salt stress. Written by Professor Dr. Medhat Majeed Al-Sahuki (2013).</p>
Recommended books and references (scientific journals, reports...)	All books, scientific journals, and reports specialized in land cultivation.
Electronic References, Websites	All references and Internet sites interested in land cultivation.


Practical Lecturer
Abdullah Khadir Muhammad


Chairman of the Scientific.

Dr. Weam Yahya Rashid




Theoretical Lecturer
. Dr. Dheyaa Fathi Aljuburi


Head of Field Crops Dep.
Dr. Moyassar Mohammed Aziz