

## Description of the course of Cereal Crops

Course Name	
Cereal Crops	
CourseCode	
CERC309	
Semester/ Year	
Second / 2025	
Date of preparation of this description	
15 January 2025	
Available attendance forms	
Full-time (theoretical lecture and practical lecture) weekly	
Number of Credit Hours (Total)/ Number of Units (total)	
2 theoretical hours and 3 working hours per week for 15 weeks, the number of units is 3.5 units	
Name of the course administrator (if more than one name is mentioned)	
Dr. Nader Fleih Ali Al-Mubarak                      Email: nadiralmubarak@uodiyala.edu.iq Inas Abdul Rahim Khalaf	
Course Objectives	
Objectives of the course :	Studying the most important cereal crops (wheat, barley, rice, maize, sorghum, millet, oats and rye) and identifying their economic and nutritional importance, plant classification, discrimination, stages of development, soil conditions suitable for their growth and production, the most important varieties cultivated in Iraq, and the soil and crop service operations of each of them, including calculations of plant density, quantities of seeds, fertilizers and pesticides, methods of harvesting them, conditions of storing and classifying their seeds,

**Teaching and Learning Strategies**

Strategy	• In-person lectures for 15 weeks, interspersed with two monthly exams, daily exams and scientific reports
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**Theoretical**

**Course Structure**

Week	Credits	Intended Learning Outcomes	Module / Course Name or	Teaching*method	Evaluation Method
1	2	Economic Importance – Production Centers	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinations Daily and Monthly Final and Reports day
2	2	Wheat – economic importance – production centers – place of origin. Stages of Growth – Splitting Wheat	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinations Daily and Monthly Final and Reports day
3	2	Irrigation – lying – maturation – harvesting – threshing – productivity – storage – raising and improvement of wheat – stages of flour production.	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinations Daily and Monthly Final and Reports day
4	2	Barley – economic importance – production centers – home country.	Cereal Crops	Explanation and model presentation and lecture	Examinations Daily and Monthly

				Brainstorming Debating and discussing Brainstorming	Final and Reports day
		First Quarter Examination			
6	2	Maturity – harvesting – threshing – storage – productivity – cultivation methods for barley.	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day
7	2	Rice – economic importance – production centers – place of origin.	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day
8	2	Growth stages of rice – rice collections in the world – rice division – nutritional value – distribution in Iraq – varieties.	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day
9	2	Ripening – harvesting – threshing – drying – productivity – stroking and its stages - rice flour – cooking quality qualities.	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day
10	2	Maize – Economic importance – Chemical composition of maize – Geographical distribution – Historical overview – Origin.. . Maturity	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day

		– Harvesting – Method of breeding and improvement.			
11	2	Sorghum – Economic importance – Home country – Corn varieties – Distribution in Iraq – Maturity – Harvesting and threshing.	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day
12	2	Millet – Economic importance – Production centers – Home country – Types of millet – Maturity – Harvesting – Productivity – Quality	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day
Second Quarter Examination					
14	2	Oats – economic importance – production centers – place of origin – types of oats – maturity – harvest – productivity – quality.	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day
15	2	Rye – economic importance - production centers – home country – rye species – maturity – harvest – productivity – quality	Cereal Crops	Explanation and model presentation and lecture Brainstorming Debating and discussing Brainstorming	Examinati ons Daily and Monthly Final and Reports day

**Practical Part**

Week	Credits	Intended Learning Outcomes	Unit or Topic Name	Learning Method	Evaluation Method
1	3	View soil service operations for wheat crop	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
2	3	Views of crop service operations for wheat	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
3	3	Follow up the growth stages of the wheat crop	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
4	3	Identify wheat pests from diseases, insects and Weeds.	Cereal Crops	Case history Brainstorming Debating and	Examinations Daily and Monthly
5	3	View barley soil and crop service operations	Cereal Crops	Case history Brainstorming Debating and	Examinations Daily and Monthly
First Exam					
7	3	Identify barley pests from diseases, insects and Weeds.	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
8	3	View soil service operations for rice crop	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
9	3	Views of rice crop service operations	Cereal Crops	Case history Brainstorming Debating and	Examinations Daily and Monthly
10	3	Identify rice pests from diseases, insects and Weeds.	Cereal Crops	Case history Brainstorming Debating and	Examinations Daily and Monthly
11	3	Observations of soil and crop service operations and identification of	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
12	3	Observations of soil and crop service operations and identification of	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
Second Exam					

14	3	Observations of soil and crop service operations and identification of oat	Cereal Crops	Case history Brainstorming Debating and discussing	Examinations Daily and Monthly Final and
15	3	Observations of soil and crop service operations and identification of rye	Cereal Crops	watching. Brainstorming Debating and discussing	Daily, Monthly and Final Quizzes and Daily

Course Evaluation	
Daily and monthly exams, reports and student effectiveness during the lecture .	
Learning and Teaching Resources;	
Required textbooks ( methodology if any )	1- Wheat cultivation and production techniques/ Jamal Al-Shabini . - First editions. Egyptian Library 2009. . 2- Production of field crops, d. Salah Al-Din Abdul Razzaq Shafshak and Dr. Abdul Hamid Al-Sayed Al-Dababi, 2008, Dar Al-Fikr Al-Arabi , Egypt. 3- Production of field crops / Dr.Abdul Majeed Al-Ansari , University of Baghdad 1981. 4- Production and improvement of field crops, Dr.Abdul Hamid Ahmed Al-Younis , 1993 Dar Al-Kutub Directorate for Printing
Key References (Sources)	Recent articles from the Internet, specialized scientific journals, the Journal of Agricultural Sciences - Iraq and the Virtual Library.
Recommended supporting books and references (scientific journals, reports)	Iraqi academic scientific journals
E-References, Websites	Crop Science Society Of America Library Genesis The field crops _ principles and a practice Agronomy journal. Websites, Articles, FAO reports .