Course Description Form

1. Course Name:
Fiber Crops
2. Course Code:
FICR360
3. Semester / Year:
Spring second 2024/2025
4. Description Preparation Date:
1/2/2025
5. Available Attendance Forms:
Presence
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)
Name: Lect Rayan Fadhel Ahmed Email: rayanobady79@uomosul.edu.iq Name: Assist. Lect. Ghadeer Nawaf Thanoon Email: Ghadeer.nawaf.alobaidy@uomosul.edu.iq
8. Course Objectives

Theoretical:	Practical:
• The student should be aware of the importa of fiber crops and how to produce them • For the student to imagine the reality growing fiber crops in Iraq • For the student to become familiar with sc ways and means to advance the reality of fi crop cultivation in Iraq • Identifying the most important devices used extracting fiber from fibrous crops, as well identifying the devices used in measuring quality characteristics of cotton fibres.	• Distinguish between fibrous crops in term of their external appearance (root - stem - leaves - flowers - fruits - seeds). • Identifying the most important successful varieties grown in Iraq • The student will acquire skills in how to measure the natural properties of fibers, suc as length, rank, strength, flexibility, elongation, and elasticity.

9. Teaching and Learning Strategies	
Strategy	- Interactive lecture - Brainstorming - Dialogue and discussion - Assigning tasks and reporting

	- He is assigned to prepare a report on one of the topics of fiber crops and it will be discussed therein. - Scientific visits. - Assigning group work to reveal leadership skills

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2Theoretical 3Practical	theoretical: a1: defines fiber crops and divides them into several groups b1: divides the fibrous crops into several groups 3practical: a7: botanically describes the main parts of the cotton crop and shows the most important varieties grown in iraq.	theoretical: Fiber crops - their definition and division 3Practical: Botanical description of the cotton crop	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
2	2Theoretical 3Practical	theoretical: a2: identify important properties of filaments that are appropriate in the manufacturing process 3practical: b4: determines the chemical and anatomical composition of the flax seed and fiber	Theoretical: Properties that must be present in textile fibers 3Practical: Anatomical and chemical composition of cotton seeds and fibres	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
3	2Theoretical 3Practical	theoretical: c1: explains the most important fibrous crops grown in iraq and the world 3practical: a8: defines the process of scooping cotton b5: shows the types of halvaj	Theoretical: The most important fiber crops in Iraq and the world 3Practical: scoop	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
4	2Theoretical 3Practical	theoretical: c2: shows the method of measuring the characteristics of the rank and length of the hairs 3practical: a9: botanically describes the main parts of the flax crop and shows the most important varieties grown in iraq.	Theoretical: Natural properties of fiber 3Practical: Botanical description of flax crop	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
5	2Theoretical	theoretical:	Theoretical:	(theoretical)	Quizzes,

	3Practical	c3: explains methods for measuring the qualities of softness, toughness, elongation, and elasticity 3practical: a10: knows maceration and distinguishes between its types b6: enumerate the properties of flax fibres	Supplement the natural qualities of fiber 3Practical: Maceration in flax	Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	assignments, discussions
6	2Theoretical 3Practical	theoretical: b2: identifies the problems of growing and producing fiber crops and recommends a set of means to overcome these problems 3practical: a11: botanically describes the main parts of the jute crop and shows the most important varieties grown in iraq.	Theoretical: Obstacles to the cultivation and production of fiber crops 3Practical: Botanical description of jute crop	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
7	2Theoretical 3Practical	theoretical: d1: distinguishes between cotton groups based on staple length and identifies the most important reasons leading to low productivity 3practical: c4: demonstrates how to extract jute fibers, explaining the most important specifications of these fibers	Theoretical: Cotton crop 3Practical: Maceration in jute	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
8	2Theoretical 3Practical	theoretical: a3: he learns how to carry out the process of planting and thinning the absent shoots, as well as how to carry out the irrigation process and the use and addition of fertilizers. 3practical: a12: botanically describes the main parts of the jaljal crop and shows the most important varieties grown in iraq.	Theoretical: Cotton crop service operations 3 practical: Botanical description of the jaljal crop	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions

9	2Theoretical 3Practical	theoretical: a4: learn about the folding process, leaf drops, and familiarize yourself with the stages of cotton manufacturing processes 3practical: c5: proves how to extract jingle fibers and explains the most important specifications of these fibers	Theoretical: Supplementing cotton crop service operations 3 process: Matting in Jaljal	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
10	2Theoretical 3Practical	theoretical: a5: he is familiar with the economic importance of linen and its service processes 3practical: a13: botanically describes the main parts of the sisal crop and shows the most important varieties grown in iraq.	Theoretical: Flax crop 3Practical: Botanical description of the sisal crop	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
11	2Theoretical 3Practical	theoretical: b3: explains how to introduce flax into manufacturing processes 3practical: b7: shows the physical and chemical properties of sisal fibres	Theoretical: Stages of preparing and manufacturing linen 3 Practical: Properties of sisal fibres	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
12	2Theoretical 3Practical	theoretical: a6: he is familiar with the economic importance of jute and jute crops and learns about the process of fiber extraction 3practical: a14: botanically describes the main parts of the ramie crop and shows the most important varieties grown in iraq.	Theoretical: Jute and jute crop 3 practical: Botanical description of the ramie crop	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
13	2Theoretical 3Practical	theoretical: a7: he is familiar with the economic importance of jute and jute crops and learns	Theoretical: The crop of sisal and ramie 3 practical: Properties of ramie	(theoretical) Auditory methods. Style of writing on the	Quizzes, assignments, discussions

		about the process of fiber extraction 3practical: b8: shows the physical and chemical properties of ramie fibres	fibers	blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	
14	2Theoretical 3Practical	theoretical: e1: is aware of the most important reasons leading to a decrease in the area and productivity of fibrous crops 3practical: e3: understands the practical applications of how to perform the cotton ginning process and how to separate the seeds from the fibers	Theoretical: Solving a problem (a scientific visit to the Nineveh Agriculture Directorate) 3Practical: Solving a problem (practical applications on how to perform the cotton ginning process and how to separate the seeds from the fibers)	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions
15	2Theoretical 3Practical	theoretical: e2: understands the correct and appropriate methods for extracting and separating fibers from plants 3practical: e4: students share the necessary information and techniques for growing fiber crop plants in the field	Theoretical: Solving a problem (a scientific visit to the fields of the Agricultural Technical College to see the grown fibrous crops, as well as learning about the most important equipment used in the laboratory, especially the cotton ginning machine used to separate the hairs from the seeds) 3Practical: Solving the problem (field observations of fiber crop plants grown in Iraq with methods of growing them in the field)	(theoretical) Auditory methods. Style of writing on the blackboard. Dialogue style Direct. (practical) Assigning tasks and reporting.	Quizzes, assignments, discussions

11. Course Evaluation

	Evaluation methods	Evaluation date (week)	Degree	Percentage weight %
1	Report 1	Fourth week	2.5	2.5
2	Report 2	Fifth week	2.5	2.5
3	Short test (1) Quiz	Sixth week	2	2
4	Short test (2) Quiz	Fourteenth week	2	2
5	Short test (3) Quiz	Fifteenth week	1	1
6	Semester test (1)	Sixth week	7.5	7.5
7	Semester test (2)	Eleventh week	7.5	7.5
8	Final theoretical test	Final semester test	40	40
9	Practical field project	The fifteenth week	5	5
10	Field evaluation	Third and fifth week	2	2

11	Practical short test (1) Quiz	First week	1	1
12	Short practical test (2) Quiz	Fourth week	0.5	0.5
13	Short practical test (3) Quiz	Fourteenth week	1	1
14	Live drawings and homework	Weeks 6, 8, 9, 10, 11, 12 and 13	5.5	5.5
15	Final practical test	Final semester test	20	20
	Total	100	100%	100%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Cultivation of industrial crops in Iraq (Dr. Abdul Hamid Ahmed Al-Younis, Mr. Abdul Sattar Abdullah Al-Kuraimi). Fiber crops / Dr. Iyad Talaat Shaker
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Fiber Plants Biology, Biotechnology and Apllications / K.G. Ramawat and M.R. Ahuja (2016)
Electronic References, Websites	Mesopotamia Agriculture Magazine - Crop science

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