

## Industrial crops course description

<b>1. Course Name:</b>					
Industrial crops					
<b>2. Course Code:</b>					
INCR230					
<b>3. Semester / Year:</b>					
First semester (Autumn) 2024-2025					
<b>4. Description Preparation Date:</b>					
1/9/2024					
<b>5. Available Attendance Forms:</b>					
My presence					
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>					
2 theoretical hours / 3 practical hours (75 hours) / 3.5 units					
<b>7. Course administrator's name (mention all, if more than one name)</b>					
Name: Dr. Waleed Khalid Shahatha, Saddam Ibrahim Yahya					
Email: w.khalid83@uomosul.edu.iq					
<b>8. Course Objectives</b>					
<b>Course Objectives</b>		<ul style="list-style-type: none"> <li>Providing the student with theoretical and practical information on how to follow modern methods of industrial crop management.</li> <li>Introducing the student to the importance of industrial crops and places to grow them.</li> <li>Providing the student with theoretical and practical information on managing relevant fields, laboratories and laboratories.</li> </ul>			
<b>9. Teaching and Learning Strategies</b>					
<b>Strategy</b>		<ul style="list-style-type: none"> <li>- Interactive lecture</li> <li>- Brainstorming</li> <li>- Dialogue and discussion</li> <li>- Assigning tasks and reporting</li> </ul>			
<b>10. Course Structure</b>					
<b>Week</b>	<b>Hours</b>	<b>Required Learning Outcomes</b>	<b>Unit or subject name</b>	<b>Learning method</b>	<b>Evaluation method</b>
1	2Theoretical	a1: Learn about industrial crops and explain the importance of oil crops and their division	Industrial crops	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions



	3practical	b2: Discovers the general characteristics of some crop oils and their uses	Oil crops	Assigning tasks and reporting	
2	2Theoretical	a2: He is familiar with the economic importance of the sesame crop and identifies the soil service, crop and harvesting processes	Sesame crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b3: Tests the method of extracting oil from seeds of oil crops	Oil	Assigning tasks and reporting	
3	2Theoretical	a3: Understands the economic importance of the sunflower crop and identifies soil service, crop and harvesting processes	Sunflower crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b4: Discover the botanical description and varieties of sesame	Sesame	Assigning tasks and reporting	
4	2Theoretical	a4: He is familiar with the economic importance of the safflower crop and identifies the soil service, crop and harvesting processes	Safflower crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b5: Discover the botanical description and varieties of sunflower	Sunflower	Assigning tasks and reporting	
5	2Theoretical	e1: He is aware of the most important reasons leading to a decrease in the area and productivity of oil crops	Scientific visit to the Agricultural Technical College	Dialogue and discussion	Short exams, assignments, discussions
	3practical	b6: Discover the botanical description and most important varieties of safflower	Safflower	Assigning tasks and reporting	
6	2Theoretical	a5: Understands the economic importance of the soybean crop and identifies soil service, crop, and harvesting processes	Soybean crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b7: Discover the botanical description of soybeans and their aggregates	Soybean	Assigning tasks and reporting	
7	2Theoretical	a6: Understands the economic importance of field pistachio crops and identifies soil service, crop and harvesting processes	Groundnut crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b8: Discover the botanical description of field	Groundnut	Assigning tasks and reporting	



		pistachios			
8	2Theoretical	a7: Understands the economic importance of the rapeseed crop and identifies soil service, crop and harvesting processes	Rapeseed crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b9: Discover the botanical description of rapeseed	Rapeseed	Assigning tasks and reporting	
9	2Theoretical	a8: Understands the economic importance of the castor crop and identifies the soil service, crop and harvesting processes	Castor crop	Assigning tasks and reporting	Short exams, assignments, discussions
	3practical	c1: Discover the botanical description of castor	Castor	Assigning tasks and reporting	
10	2Theoretical	a9: Recognizes fiber crops, recognizes the economic importance of the cotton crop, and identifies the processes of soil service, yields, and harvesting.	Fiber crops (cotton crop)	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b10: Discover the botanical description of cotton and its types	Cotton	Assigning tasks and reporting	
11	2Theoretical	a10: Understands the economic importance of the flax crop and identifies soil service, yield, and harvesting processes	Flax crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b11: Discover the botanical description of flax	Flax	Assigning tasks and reporting	
12	2Theoretical	a11: Learn about sugar crops, become familiar with the economic importance of the sugar beet crop, and determine the processes of soil service, yields, and harvesting.	Sugar crops (sugar beet crop)	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	c2: Tests the method of extracting sugar in the laboratory	Sugar	Assigning tasks and reporting	
13	2Theoretical	a12: Understands the economic importance of the sugar cane crop and identifies soil service, yield and harvesting processes	Sugar cane crop	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	b12: Discover the botanical description of sugar beet and growth phases	Sugar beet	Assigning tasks and reporting	
14	2Theoretical	b1: Shows the steps for manufacturing sugar in the factory	Sugar	Interactive lecture, brainstorming,	Short exams, assignments,



				dialogue and discussion	discussions
	3practical	b13: Discover the botanical description of sugar cane	Sugar cane	Assigning tasks and reporting	
15	2Theoretical	a13: Recognizes narcotic crops, becomes aware of the economic importance of tobacco crop, and identifies the processes of soil service, crops, and harvesting.	Narcotic crops (tobacco)	Interactive lecture, brainstorming, dialogue and discussion	Short exams, assignments, discussions
	3practical	e2: He is aware of the correct and appropriate methods for extracting and separating oil, fiber and sugar from industrial crops	Agricultural Research Department / Nineveh Research Division	Assigning tasks and reporting	

#### Course Evaluation

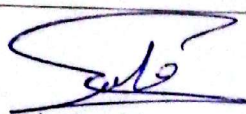
Sequence	Calendar methods	Calendar date (week)	Class	Relative weight %
1	Report 1	fourth week	2.5	2.5
2	Report 2	fifth week	2.5	2.5
3	Short test (1) Quiz	sixth week	2	2
4	Short test (2) Quiz	fourteenth week	2	2
5	Short test (3) Quiz	fifteenth week	1	1
6	Semester test (1)	sixth week	7.5	7.5
7	Semester test (2)	eleventh week	7.5	7.5
8	Final theoretical test	Final semester exams	40	40
9	Practical field project	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 exams	20	20
	The total	100	100%	100%

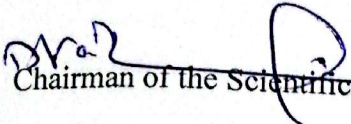
#### 11. Learning and Teaching Resources


Required textbooks (curricular books, if any)	Industrial crop cultivation in Iraq: Dr. Abdul Ham Ahmed Younis and Mr. Abdul Sattar Abdullah A Karakji.
Main references (sources)	Oil and sugar crops: Dr. Tawakkol Younis Rizk

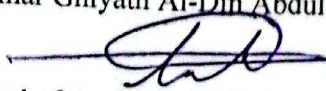


	Hikmat Abdul Ali.
Recommended books and references (scientific journals, reports...)	<a href="https://magrj.mosuljournals.com/?lang=ar">https://magrj.mosuljournals.com/?lang=ar</a>
Electronic References, Websites	University of Mosul e-learning website

  
Theoretical subject teacher  
Dr. Waleed Khalid Shahatha

  
Chairman of the Scientific Committee  
Dr. Ahmed Awad Talib

  
Practical subject teacher  
Dr. Omar Ghiyath Al-Din Abdul Ghafoor

  
Head of Agricultural Extension and  
Technology Transfer Department  
Dr. Talal Saeed Hamid

