

Course Description Form

1. Course Name:	
Food processing	
2. Course Code:	
FOPR470	
3. Semester / Year:	
The second semester (spring)	
4. Description Preparation Date:	
1/ 2 / 2024	
5. Available Attendance Forms:	
In classes	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2 theoretical +3 practical / 3.5 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Assistant Professor Doctor . Shaymaa Email: Name : Assistant teacher . AFKAR YAHYA AHMED Email: afkar. ahmed@uomosul.edu.iq	
8. Course Objectives	
<p>Theoretical</p> <ul style="list-style-type: none"> - Enable the student to understand and absorb everything related manufacturing .The fact that food is to introduce the student t one of the most important Living requirements. - The need to be familiar with the various conservation methods, which on the Its basis is based food manufacturing . - Introducing the student to some industries such as the oil industry Fats, their refining, hydrogenated oils and other industries 	<p>Practical</p> <ul style="list-style-type: none"> - Introducing the student to the method of food processing. _ Enable the student to manufacture various foods. _ Conducting tests on processed foods
9. Teaching and Learning Strategies	
Strategy	<ul style="list-style-type: none"> - Interactive lecture - Brainstorming

- Dialogue and discussions.
- Assignment of tasks to answer some external questions.
- Commissioning to submit an end-of-course report entitled From the student's diligence is related to the academic subject
- Conducting manufacturing methods.
- Practical tests conducted in the laboratory.
- Submit reports at the end of the practical lesson.

10. Course Structure

We ek	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theoretically 3 practical	<p>Theory: A1 Remembers the benefits of these roasting step</p> <p>Practical A1, B1 Classifies fats according to their sources and according to their composition</p>	<p>Theory: Oil and industry</p> <p>Practical Types of fat</p>	<p>Theory: Audio styles Writing on Blackboard Style Direct dialogue</p> <p>Practical Audio styles Writing on The blackboard Conducting the test</p>	Short exams, assignment of Duty, Discussions
2	2 theoretically 3 practical	<p>Theory: B1 Enumerates steps of oil refining</p> <p>Practical B2 Recognizes damage Refined oils</p>	<p>Theory: Oil and fat Industry</p> <p>Practical Fats, refined oil</p>	<p>Theory: Audio styles Writing on Blackboard Style Direct dialogue</p> <p>Practical Audio styles Writing on</p>	Short exams, assignment of Duty, Discussions

				The blackboard Conducting the test	
3	2 theoretically 3 practical	Theory: A2 Understands the types of damage and its cause to oils Practical A3 Distinguish oil substitutes Hydrogenation	Theory: Damage to oils and fats Practical Hydrogenated Oils	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty, Discussions
4	2 theoretically 3 practical	Theory: C1 writes a report on the benefits and harms hydrogenation Practical B4 Distinguish acidity number, peroxide number, moisture percentage and iodine number	Theory: Hydrogenated fats Practical Quality tests of oils and fats	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty, Discussions
5	2 theoretically 3 practical	Theory: C2 Explains the scientific basis of soap making Practical B5 Applies the method of making vinegar from dates	Theory: By-products of industry Oils Practical Vinegar industry	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty, Discussions

6	2 theoretically 3 practical	<p>Theory A3 Defines protein-based substitutes</p> <p>Practical B6 Recognizes fermentation Ethanol and cellular fermentation</p>	<p>Theory Fat substitutes</p> <p>Practical Alcoholic fermentation</p>	<p>Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test</p>	Short exams, assignment of Duty, Discussions
7	2 theoretically 3 practical	<p>Theory: B2 The chemical composition of the tricalciride is given by</p> <p>Practical C1 Calculates the amount of sugar and sour</p>	<p>Theory: Chocolate and cocoa industry</p> <p>Practical Calculation vinegar results from glucose sugar</p>	<p>Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test</p>	Short exams, assignment of Duty, Discussions
8	2 theoretically 3 practical	<p>Theory: B3 Identifies the benefits of industrial ferments</p> <p>Practical C2 He tries vinegar tests</p>	<p>Theory: Industrial ferments</p> <p>Practical Tests performed vinegar</p>	<p>Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test</p>	Short exams, assignment of Duty, Discussions
9	2 theoretically 3 practical	<p>Theory: C3 Documents the ingredients of carbonated Drinks</p>	<p>Theory: Soft drinks industry</p>	<p>Theory: Audio styles Writing on Blackboard Style Direct Dialogue</p>	Short exams, assignment of Duty, Discussions

		Practical A4 Performs pickling steps For vegetables	Practical Lactic fermentation	Practical Audio styles Writing on The blackboard Conducting the test	
10	2 theoretically 3 practical	Theory: D1 Discovers the purpose of adding chlorine to water used in soft drinks Practical B7 Performs pickle making steps	Theory: Soft drinks industry Practical Pickle industry	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty, Discussions
11	2 theoretically 3 practical	Theory: D2 Correlates with scheme of relationship between temperature, enzyme activity And their destruction Practical B8 Applies ketchup making steps	Theory: Manufacture tomato products Practical Ketchup manufacturing	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty, Discussions
12	2 theoretically 3 practical	Theory: C4 Enumerates the stages of making a kejob Practical B9 Performs the steps of the mayonnaise industry	Theory: Paste industry Tomato and ketchup Practical Manufacture mayonnaise	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty, Discussions

13	2 theoretically 3 practical	Theory: A4 Enumerates the stages of making a kejob Practical B10 Apply industry steps The Sauce	Theory: Dried fruit industry and High sugar content Practical Manufacture of Sauce	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty
14	2 theoretically 3 practical	Theory: A5 Defines acetic and lactic fermentati Practical B11 Solves a problem	Theory: Acetic and Lactic fermentation Practical Scientific visit to a food processing plant	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Viewing device Equipment used in Food industry	Short exams, assignment of Duty Discussions Practical Writing a report on the scientific visit
15	2 theoretically 3 practical	Theory: C5 Proves the differences between the types of sesame in terms of chemical compositio Practical B12 Applies Rashi industry	Theory: Industry based Sesame crop Practical Sesame	Theory: Audio styles Writing on Blackboard Style Direct dialogue Practical Audio styles Writing on The blackboard Conducting the test	Short exams, assignment of Duty Discussions Sho exams, assignment of Duty Discussions

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports ... etc

	Calendar methods	Calendar date (week)	Degree	Relative weight %
1	Theoretical final	Theoretical Week	7 theoretical +6 practical	13%

	report + practical experience reports	15 Practical Week 15		
2	Quiz (1)	Week 3	4 theoretical +2 practical	6%
3	Midterm Exam (theoretical and practical)	Week 9	10 theoretical +5 practical	15%
4	Quiz(2)	Week 12	4 theoretical +2 practical	6%
5	Final practical test	Practical exam week	20	20%
6	Final theoretical test	A week of theoretical exams	40	40%
	Total		100	100%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Food manufacturing part 2 Alhakeem, and Hasan
Main references (sources)	Food manufacturing part 2 Alhakeem, and Hasan
Recommended books and references (scientific journals, reports...)	Many books and magazines Including Food Science, potter j.
Electronic References, Websites	World Health Organization(WHO) and the US Food and drug organization (USFDA)

Instructor of theoretical part

Shaymaa ridhe abd Al salaam

Instructor of practical part

Afkar yahya ahmed

Chairman of the scientific committee

Prof. Dr. Moafak mahmood ahmed

Head of the department of Food science

Prof. Dr. Sumaya khalaf badawi