Course Description Form

1. Course Name:

Liquid Dairy Products

2. Course Code:

LIDP375

3. Semester / Year:

Second spring semester 2024-2025

4. Description Preparation Date:

2025\2\1

5. Available Attendance Forms:

In presence

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: M.D. Zaman Nadhim Taher

Name: M.M. waead allah hashim

8. Course Objectives

Course Objectives	practical:
theoretical: - Enabling the student to understand and comprehend what is related to the manufacture of dairy products - Enabling the student to know the most important methods of preserving milk - The student's ability to identify milk adulteration -- Enable the student to purify and filter milk - The student can distinguish between types of product manufacturing technology	Enabling the student to become familiar with the most important manufacturing methods and to become familiar with the most important modern methods for producing various dairy products

9. Teaching and Learning Strategies

Strategy	practical:
theoretical: -Interactive lecture - Brainstorming	- Assigning group work to reveal leadership skills - Assigning tasks and reporting for each experiment - Dialogue and discussion

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- Dialogue and discussion - Assigning tasks and reporting - Offers for models made from dairy products - He is assigned to prepare a diligence report and discuss it with the students	-Brainstorming - Interactive practical lecture

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2Theoretical 3 practical	theoretical: a1) The student learns about the chemical composition of milk, the positive and negative relationship between the composition of milk components, and the causes of milk contamination. practical : c1) The student examines and the received milk samples.	theoretical: Milk Definitions -Factors Affecting milk composition Practical: taking and examining samples	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
2	2Theoretical 3 practical	theoretical: a1) The student learns about the chemical composition of milk, the positive and negative relationship between the composition of milk components, and the causes of milk contamination. Practical: b1) The student identifies methods of manufacturing and analyzing milk derivatives.	theoretical: Properties of milk Chemical and physical Practical: Chemical analysis of milk	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions

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3	2Theoretical 3 practical	theoretical: a1) The student learns about the chemical composition of milk, the positive and negative relationship between the composition of milk components, and the causes of milk contamination. Practical: c1) The student examines and the received milk samples.	theoretical: Types of bacteria in Milk and sources pollution With it Practical: measuring the microbial content of milk	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
4	2Theoretical 3 practical	theoretical: a2) The student is familiar with the types of milk proteins, the positive and negative relationship between its components, and the estimation of milk constants. practical : b1) The student identifies methods of manufacturing and analyzing milk derivatives.	theoretical: Prepare milk in Farm and milk receiving Practical: purify and filter impurities	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
5	2Theoretical 3 practical	theoretical: a1) The student learns about the chemical composition of milk, the positive and negative relationship between the composition of milk components, and the causes of milk contamination. practical :	theoretical: Milk collection centers Practical: milk sorting	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions

		b1) The student identifies methods of manufacturing and analyzing milk derivatives.			
6	2Theoretical 3 practical	theoretical: a2) The student is familiar with the types of milk proteins, the positive and negative relationship between its components, and the estimation of milk constants. Practical: c1) The student examines and the received milk samples.	theory: Adjusting the percentage of fat in milk (Pearson square) Practical: pasteurization and sterilization of milk	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
7	2Theoretical 3 practical	theory: a1) The student learns about the chemical composition of milk, the positive and negative relationship between the composition of milk components, and the causes of milk contamination. practical : c1) The student examines and the received milk samples.	theory: Purification of milk from Impurities and cooling practica: milk adulteration	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
8	2Theoretical 3 practical	theory: a2) The student is familiar with the types of milk proteins, the positive and negative relationship between its components, and	theory: Delivery of milk to the laboratory And quality control	theoretical: Methods Audio Writing style On the board Dialogue style Direct	Short exams, assignments, and discussions

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		the estimation of milk constants. practical : b1) The student identifies methods of manufacturing and analyzing milk derivatives.	practical: naturalization of milk	Practical: Assigning tasks and reporting	
9	2Theoretical 3 practical	theory: a2) The student is familiar with the types of milk proteins, the positive and negative relationship between its components, and the estimation of milk constants. practical : b1) The student identifies methods of manufacturing and analyzing milk derivatives.	theory: Milk homogenization and Thermal transactions Practical: grafted milk products	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
10	2Theoretical 3 practical	theory: a2) The student is familiar with the types of milk proteins, the positive and negative relationship between its components, and the estimation of milk constants. practical : b1) The student identifies methods of manufacturing and analyzing milk derivatives.	theory: Sweetened condensed Milk Practical: whipped cream	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
11	2Theoretical practical	Theoretical: d1) The student communicates with a dairy factory to	theory: scientific visit to the dairy factory	theoretical: Methods Audio Writing style	Short exams, assignments, and

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		evaluate the production situation. Practical: c1) The student examines and the received milk samples.	practical: Analysis and viewing of milk samples	On the board Dialogue style Direct Practical: Assigning tasks and reporting	discussions
12	2Theoretical 3 practical	theory: b1) The student identifies methods of manufacturing and analyzing milk derivatives. practical : c1) The student examines and the received milk samples.	theory: Dried Dairy Products practical: manufacturing lactic ferments	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
13	2Theoretical 3 practical	theory: a1) The student learns about the chemical composition of milk, the positive and negative relationship between the composition of milk components, and the causes of milk contamination. Practical: b1) The student identifies methods of manufacturing and analyzing milk derivatives.	theory: Report and discuss Practical: making butter	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
14	2Theoretical 3 practical	Theory: a1) The student learns about the chemical composition of milk, the positive and negative relationship between the	My theory: Chemical composition of cream practical: Cream industry	theoretical: Methods Audio Writing style On the board	Short exams, assignments, and discussions

		composition of milk components, and the causes of milk contamination. .practical : b1) The student identifies methods of manufacturing and analyzing milk derivatives.		Dialogue style Direct Practical: Assigning tasks and reporting	
15	2Theoretical 3 practical	Theory: d1) The student communicates with a dairy factory to evaluate the production situation.. practical : d1) The student communicates with a dairy factory to evaluate the production situation.	theory: Problem solving Practical: Problem solving	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions

11. Course Evaluation

t	Calendar methods	Calendar date (week)	Class	Relative weight %
1	Report 1	fourth week	2.5	2.5
2	Report 2	The fifth week	2.5	2.5
3	Short test (1) Quiz	the sixth week	2	2
4	Short test (2) Quiz	The fourteenth week	2	2
5	Short test (3) Quiz	The fifteenth week	1	1
6	Semester test (1)	the sixth week	7.5	7.5
7	Semester test (2)	The eleventh week is difficult	7.5	7.5

8	Final theoretical test	Final semester exams	40	40
9	Laboratory application	The fifteenth week	5	5
10	Laboratory evaluation	The third and fifth week	2	2
11	Practical short test (1) Quiz	The first week	1	1
12	Short practical test (2) Quiz	fourth week	0.5	0.5
13	Short practical test (3) Quiz	The fourteenth week	1	1
14	Practical test	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%

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	General dairy principles,
Main references (sources)	Scientific journals and articles
Recommended books and references (scientific journals, reports...)	Specialized books in the field of dairy science a its products Books on liquid dairy products
Electronic References, Websites	Scientific electronic websites specialized in studying milk and its processing

Theoretical subject teacher : Dr. Zaman nadhim taher

Practical subject teacher: M.M. waead allah hashim

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