

Course Description Form

1. Course Name:

Liquid Dairy Products

2. Course Code:

LIDP374

3. Semester / Year:

First autumn semester 2023-2024

4. Description Preparation Date:

2024\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

Email: M.D. Saif Ali

8. Course Objectives

Course Objectives

theoretical:

Enabling the student to understand and absorb what is related to dairy principles

And its relationship to the dairy industry and its preservation

- Enabling the student to know the most important methods of preserving milk

- Enabling the student to become familiar with the most important sources of contamination in milk

- Empowering the student with the ability to detect types of spoilage in milk

- The student can judge the types of milk and how quickly it spoils

..... practical:

Enabling the student to become familiar with the most important laboratory methods for detection and to become familiar with the most important analytical methods for analyzing milk products

9. Teaching and Learning Strategies

<p>Strategy</p> <p>theoretical:</p> <ul style="list-style-type: none"> - Interactive lecture - Brainstorming - Dialogue and discussion - Assigning tasks and reporting - Presentations of models of milk spoilage due to microbial contamination - He is assigned to prepare a diligence report and discuss it with the students 	<p>practical:</p> <ul style="list-style-type: none"> - Assigning group work to reveal leadership skills - Assigning tasks and reporting for each experiment
---	---

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2Theoretical 3 practical	<p>theoretical:</p> <p>B1 : The student Rules on Shows the relationship Positive and negative in between milk and Dairy product formulation</p> <p>practical :</p> <p>B1: The student takes different samples of milk</p>	<p>theoretical:</p> <p>Milk Definitions - Factors Affecting milk composition</p> <p>Practical: taking and examining samples</p>	<p>theoretical:</p> <p>Methods</p> <p>Audio Writing style On the board</p> <p>Dialogue style Direct</p> <p>Practical: Assigning tasks and reporting</p>	<p>Short</p> <p>exams, assignments, and discussions</p>
2	2Theoretical 3 practical	<p>theoretical:</p> <p>C1 : The student gets to know Study and identify all Properties of</p>	<p>theoretical:</p> <p>Properties of milk Chemical and physical</p>	<p>theoretical:</p> <p>Methods</p> <p>Audio Writing style On</p>	<p>Short</p> <p>exams, assignments, and discussions</p>

		<p>Milk</p> <p>Practical:</p> <p>A1: The student learns how to take models and analyze them chemically</p>	<p>Practical:</p> <p>Chemical analysis of milk</p>	<p>the board</p> <p>Dialogue style Direct</p> <p>Practical: Assigning tasks and reporting</p>	
3	<p>2Theoretical</p> <p>3 practical</p>	<p>theoretical:</p> <p>B2 : The student is judged Detection of pollutants With milk and products</p> <p>Practical:</p> <p>B2: The student tests certain types of milk for microbial content</p>	<p>theoretical:</p> <p>Types of bacteria in Milk and sources pollution</p> <p>With it</p> <p>Practical:</p> <p>measuring the microbial content of milk</p>	<p>theoretical:</p> <p>Methods</p> <p>Audio Writing style On the board</p> <p>Dialogue style Direct</p> <p>Practical: Assigning tasks and reporting</p>	<p>Short</p> <p>exams, assignments, and discussions</p>
4	<p>2Theoretical</p> <p>3 practical</p>	<p>theoretical:</p> <p>A2 : The student is judged Work on defining Receiving Paths And distribution of milk</p> <p>practical :</p> <p>A2: The student uses strainers to purify the milk</p>	<p>theoretical:</p> <p>Prepare milk in Farm and milk receiving</p> <p>Practical: purify and filter impurities</p>	<p>theoretical:</p> <p>Methods</p> <p>Audio Writing style On the board</p> <p>Dialogue style Direct</p> <p>Practical: Assigning tasks and reporting</p>	<p>Short</p> <p>exams, assignments, and discussions</p>
5	<p>2Theoretical</p> <p>3 practical</p>	<p>theoretical:</p> <p>C2 : The student experiences a process Collect milk from Animal breeders</p> <p>practical :</p> <p>B3: The student performs the</p>	<p>theoretical:</p> <p>Milk collection centers</p> <p>Practical: milk sorting</p>	<p>theoretical:</p> <p>Methods</p> <p>Audio Writing style On the board</p> <p>Dialogue style Direct</p>	<p>Short</p> <p>exams, assignments, and discussions</p>

		process of sorting milk using a separator		Practical: Assigning tasks and reporting	
6	2Theoretical 3 practical	theoretical: A2 : The student seeks To Use equations Mathematical and arithmetic To adjust milk fat Practical: B4: The student learns about the methods of heat treatment of milk	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: B3 : The student tries Use Purification and filtration methods And use devices Cooling practical : B5: The student discusses the types of milk adulteration	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: A3 : The student works on to set Receiving Paths And distribution of milk practical : A3: The student makes a comparison	theory: Delivery of milk to the laboratory And quality control practical: naturalization of milk	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and	Short exams, assignments, and discussions

		between regular and naturalized milk		reporting	
9	2Theoretical 3 practical	theory: A4 : The student tries Use pasteurization methods And sterilize milk And keep it for the longest time practical : A4: The student manufactures flavored milk	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: A5 : The student tries Manufacture of condensed milk Sweetened Using modern methods practical : A4: The student tests types of whipped cream	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 3 practical	theory: A6: The student tries Manufacture of grafted milk By modern methods practical : B6: The student makes types of cheese	theory: Flavored milk products practical: cheese making	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions

12	2Theoretical 3 practical	theory: A7: The student tries Manufacture of dried dairy By modern methods practical : A6: The student learns about methods of manufacturing fermenters	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: Student runs circlesDiscussion regarding safety Milk and ways to protect it Practical: A6: The student learns about the factors related to butter production	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: A8: Student identification of health risks Its impact on human health and the impact of negligence on Public Health practical : A6: The student makes the game	My theory: A field visit to some Dairy factories and submit a report Common microorganisms In milk contamination practical: making gems	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
15	2Theoretical 3 practical	Theory: A8: Student	theory: A field visit to	theoretical: Methods	Short exams,

		<p>identification of health risks</p> <p>Its impact on human health and the impact of negligence on Public Health</p> <p>practical :</p> <p>A3: The student determines the validity of the milk samples</p>	<p>some Dairy factories and submit a report</p> <p>Common microorganism In milk contamination</p> <p>Practical: Solve a problem</p>	<p>Audio Writing style On the board</p> <p>Dialogue style Direct</p> <p>Practical: Assigning tasks and reporting</p>	<p>assignments, and discussions</p>
--	--	---	---	--	-------------------------------------

11. Course Evaluation

T	Calendar methods	Calendar date (one week)	Class	Relative weight %
1	Final theoretical report + practical experience report	My theory is week 15 My work week is 1-15	7theoretical + 6 practical	13%
2	Short test (1) Quiz	week (3)	4theoretical + 2 practical	6%
3	Midterm Exam (theoretical and practical)	week (9)	10theoretical + 5 practical	15%
4	Short test 2 Quiz	week (12)	4theoretical + 2 practical	20%
5	Final practical test	Practical exam week	20	20%
6	اختبار نظري نهائي	A week of theoretical exam	40	40%
	المجموع		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)	Books on liquid dairy products
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Liquid Dairy Products Book (1982)
Electronic References, Websites	The World Health Organization and the Food and Drug Administration American

Instructor of theoretical part

Dr. Zaman nadhim taher

Instructor of practical part

Saif Ali

Chairman of the scientific committee

Prof. Dr. Moafak mahmood ahmed

Head of the department of Food science

Prof. Dr. Sumaya khalaf badawi

Theoretical subject teacher : Dr. Zaman nadhim taher

Practical subject teacher: M.M. waeed allah hashim

Chairman of the Scientific Committee: Prof. Dr. Mowafaq Mahmoud Ahmed

Head of the Food Science Department: Prof. Dr. Sumaya Khalaf Badawi