

Republic of Iraq

**The Ministry of Higher
Education**

& Scientific Research

بسم الله الرحمن الرحيم



University: Diyala

College: Agriculture

Department: Animal production

Stage: second

Lecturer name: Dhilal Mehdi

Qualification: Assistant Professor

**Place of work: Coll. Of
Agriculture**

Flow up of implementation celli pass play

Course Instructor	Assist. Prof. Dhilal Mehdi Abdul-kadir Alrubaye				
E-mail	dhilalmahdi@uodiyala.edu.iq				
Title	Dairy principles				
Course Coordinator	Spring Course \ 2024-2025				
Course Objective	The goal is to learn the student to how to benefit from milk in the manufacture of various food products, As Yogurt , Butter , Cream Chocolate milk and Cheese.				
Course Description	The student shoud learn what is the science of the Dairy products- What tests are performed on milk upon receipt? how to benefit from milk in the manufacture of various food products, As Yogurt , Butter , Cream Chocolate milk and Cheese .				
Textbook	<ol style="list-style-type: none"> 1. Al-Shabibi.M. ; Shukri, M. ; Touma , S. and Al – Takriti .1999. Principles of dairy science. The Ministry of Higher education 2. Al- Takriti ,H. and Alkual . K. 1984. Principles of dairy manufacturing. The Ministry of Higher education 3.Jasem ,H. 1987. Impact of processing on milk . The Ministry of Higher education 4. Muhanna, N. 2002. Manufacturring and functional properties of milk proteins.Egypt 5. Faculty members of the department of dairy science and technology.Fundamentals of dairy science and technology. College of Agriculture , Egypt 6. Abu-foul, N.2009. Dairy products industry. Gaza 7. Al-Khafaji. Z. Biology of microscopic food. 8. Metri, W. 2022. Introduction of food science (dairy products) 9. Al-Omar.2014.Dairy health and technology. Al-baath university publication 10. Al-Hawari , M. Dairy technology and products. College of Agriculture , Egypt 11. Hussein ,S. 2022. Dairy principles. College of Agriculture , Egypt 12. Hammad, M. 2020. Dried and condensed milk. College of Agriculture , Egypt 				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	20%	15%	5%		60%
General Notes					

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week	Date	Topics Covered	Practical Part
1	1 st week	Teaching the student the concept of dairy science and how to secrete milk from animals	Teaching the student the concept of milk
2	2 nd week	Introducing the student to the concept of milk , its types, pasteurized, sterilized and dried , its components and nutritional value	Types of simple and complex milk samples
3	3 rd Week	Introduce the student to the genetic and environmental factors affecting the composition of milk	Tests conducted on milk before it is received in factories and dairy plants , How to check for in milk
4	4 th Week	The student introduces the properties of milk and studies them	What's tests are done on milk
5	5 th Week	Defining the students diseases transmitted in milk	How to estimate acidity in milk
6	6 th Week	Introducing the student to the methods used to prevent the transmission of diseases through milk and its products to humans	What is meant by natural acidity and advanced acidity in milk
7	7 th Week	The student gets to know how milk is prepared in dairy factories	Microbiological tests on milk
8	8 th Week	The student will learn about the effect of temperature ,pasteurization , and education on milk in terms of its nutritional value and sensory properties	Milk protein stability tests
9	9 th Week	The student gets to Know the microorganisms present milk	How to estimate the fat content of milk
10	10 th Week	The student will Know how to modify the percentage of fat in milk	Yogurt making
11	11 th Week	The student will Know how to naturalize milk and what is meant by naturalized milk	Butter making
12	12 th Week	For the student to Know how cream is manufactured and the factors affecting its manufacture	Chocolate milk manufacturing
13	13 th Week	The student will Know how to manufacture Yogurt and Cheese	Cheese making
14	14 th Week	The student will be familiar with the secondary components of milk ; milk sorting , Whey , and Churning	Milk adulteration. How to detect it.
15	15 th Week	Exam	Exam

Instructor's signature

Asst. prof. Dhilal Mehdi Abdul-kadir
15 / 1 / 2025

Dean Signature:
Prof. Dr.Raead Ibrahim Khalil
15/1/2025