

## Course Description Form

<b>1. Course Name:</b>	
Butter and ice cream	
<b>2. Course Code:</b>	
BUIC471	
<b>3. Semester / Year:</b>	
Second semester(spring)/ 2023-2024	
<b>4. Description Preparation Date:</b>	
1/2/2024	
<b>5. Available Attendance Forms:</b>	
Attendance lesson	
<b>6. Number of Credit Hours (Total) / Number of Units (Total): units</b>	
30 hours/30 units+ 45 hours/	
<b>7. Course administrator's name (mention all, if more than one name):</b>	
Name: dr. Azhar Ibrahim shukur Email: <a href="mailto:azhar.Ibrahim@uomosul.edu.iq">azhar.Ibrahim@uomosul.edu.iq</a> Name: Assinant Lectuer israa maan ahmed Email <a href="mailto:Israa.maan@uomosul.edu.iq">Israa.maan@uomosul.edu.iq</a>	
<b>8. Course Objectives</b>	
<b>Theoretical:</b>  * Enabling the student to understand what is related to the manufacture of butter and ice cream and to identify the widespread types of them  * Enabling the student to become familiar with the most important and common defects of butter and ice cream  * The student can judge different types of butter and ice cream	<b>practical:</b>  - Enabling the student to learn about the most important laboratory methods for producing butter and ice cream
<b>9. Teaching and Learning Strategies</b>	
Theoretical:	practical: Assigning group work and revealing

- Interactive lecture
- Brainstorming
- Dialogue and discussion
- Assigning tasks and reporting
- Presentations of samples of cheese
- The student is assigned to prepare a report entitled:  
His diligence prepares him for discussion with students

students' skills - assignment  
Assignments to write a report for each experiment.

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Name of Unit or subject	Learning method	Evaluation method
First	2Theoretical 3Practical	<b>Theoretical:</b> <b>a 1/ Recognizes butter</b> <b>Its standard recipes</b>  <b>Practical</b> <b>b 6/</b> <b>Explains the scientific ba</b> <b>of the milk sorting proc</b>	<b>Theoretical:</b> <b>A historical overview</b> <b>the butter industry -</b> <b>definition</b> <b>Butter</b> <b>practical</b> <b>Milk sorting</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue st <b>practical :</b> Assigning tasks a reporting	Short exams, assignments, or discussions
Second	2Theoretical 3Practical	<b>Theoretical:</b> <b>b 1/ It enumerates</b> <b>principles on wh</b> <b>separation equipment</b> <b>designed</b>  <b>Practical</b> <b>b 7/ Proves the method fo</b> <b>controlling the fat percent</b> <b>in cream</b>	<b>Theoretical:</b> <b>General steps for</b> <b>making butter/sortin</b>  <b>practical</b> <b>Milk sorting</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks a reporting	Short exams, assignments, or discussions
Third	2Theoretical 3Practical	<b>Theoretical:</b> <b>C1/ Explains the benefi</b> <b>of pasteurization</b> <b>For cream</b> <b>And its methods and th</b> <b>way to shake it</b> <b>practical</b> <b>b 8/ Proves the method</b> <b>determining the acidity</b> <b>cream</b>	<b>Theoretical:</b> <b>Pasteurization of</b> <b>cream intended for</b> <b>making butter</b>  <b>practical</b> <b>Chemical tests for</b> <b>cream</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks a reporting	Short exams, assignments, or discussions
Fourth	2Theoretical 3Practical	<b>Theoretical:</b> <b>a 2/ He lists the</b> <b>disadvantages of butter</b> <b>terms of flavour, textur</b> <b>and colour</b> <b>practical</b> <b>b 9/ It links calculations t</b> <b>estimate the amount of</b> <b>cream and the amount</b>	<b>Theoretical:</b> <b>Disadvantages of but</b> <b>practical</b> <b>Cream calculations.</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks a reporting	Short exams, assignments, or discussions

		<b>milk needed to produce</b>			
Fifth	2Theoretical 3Practical	<b>Theoretical:</b> <b>b 2/ Enumerates the raw materials used in the manufacture of margarine</b> <b>practical</b> <b>c5/ It is recommended to adjust the fat percentage in cream or milk</b>	<b>Theoretical:</b> <b>Margarine</b> <b>practical</b> <b>Cream calculations</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Sixth	2Theoretical 3Practical	<b>Theoretical:</b> <b>a 3/ Explains how to make Margarine</b> <b>practical</b> <b>c 6/ Shows the alkalis used in neutralizing the acidity of cream</b>	<b>Theoretical:</b> <b>Desirable qualities of margarine</b> <b>practical</b> <b>Testing the acidity of cream and adjusting the acidity with different alkalis</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Seventh	2Theoretical 3Practical	<b>Theoretical:</b> <b>a 4/ Mentions the method of making ghee</b> <b>practical</b> <b>c7/ Applies the steps of making butter and ice cream</b>	<b>Theoretical:</b> <b>Ghee</b> <b>practical</b> <b>Butter industry</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
eighth	2Theoretical 3Practical	<b>Theoretical:</b> <b>a 5/ He is familiar with all types of milk ice cream</b> <b>practical</b> <b>c8/ Proves Butter calculations.</b>	<b>Theoretical:</b> <b>A historical overview of milk ice cream - Definition of milk ice cream</b> <b>practical</b> <b>Butter industry</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Ninth	2Theoretical 3Practical	<b>Theoretical:</b> <b>C2/ Calculates the calories obtained from milk cream</b> <b>practical</b> <b>c9/ Shows how to make ghee</b>	<b>Theoretical:</b> <b>Nutritional value of yogurt ice cream</b> <b>practical</b> <b>Ghee (free fat)</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Tenth	2Theoretical 3Practical	<b>Theoretical:</b> <b>b 3/ List the ingredients involved in making milk ice cream</b>	<b>General steps for Ingredients used in the manufacture of dairy and non-dairy ice cream</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style	Short exams, assignments, or discussions

		<b>practical d 1/ Calculate the purity of ghee</b>	<b>practical Creamy ice cream</b>	<b>practical :</b> Assigning tasks and reporting	
Eleventh	2Theoretical 3Practical	<b>Theoretical: b 4/ Determine the properties of ice cream mixture</b>  <b>practical d 2/ He experiments with making creamy ice cream</b>	<b>Theoretical: Properties of the mixture practical Calculate the ingredients of the creamy ice cream mixture</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Twelveth	2Theoretical 3Practical	<b>Theoretical: b 5/ Preparation steps Ice cream mix practical d 3/ Calculate the components of a creamy ice cream mixture (Pearson square)</b>	<b>Theoretical: How to make milk ice cream practical Calculate the ingredients of the creamy ice cream mixture</b>	<b>Theoretical:</b> Auditory methods Writing style on the blackboard Direct dialogue style <b>practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Thirteenth	2Theoretical 3Practical	<b>Theoretical: C3/ List the disadvantages of ice cream In terms of flavour, texture and colour</b>  <b>practical d 4/ Calculate components of a creamy ice cream mixture (simple mixture calculation)</b>	<b>Theoretical: Disadvantages of milk ice cream practical</b>  Calculate the ingredients of the creamy ice cream mixture	<b>Theoretical: Auditory methods Writing style on the blackboard Direct dialogue style practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Fourteenth	2Theoretical 3Practical	<b>Theoretical: C4/ He explains the Soft ice cream practical d 5/ Experience industry Water ice cream.</b>	<b>Theoretical: Soft ice cream /sherbet/water ice cream practical Water ice cream?</b>	<b>Theoretical: Auditory methods Writing style on the blackboard Direct dialogue style practical :</b> Assigning tasks and reporting	Short exams, assignments, or discussions
Fifteenth	2Theoretical 3Practical	<b>Theoretical: e 1/ Communicates with one of the laboratories Dairy producing practical e 2 / Communicates with one of the laboratories Dairy producing</b>	<b>Theoretical: Solve the problem  Solve the problem</b>	<b>Theoretical: Auditory methods Writing style on the blackboard Direct dialogue style</b>	Short exams, assignments, or 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 . The average is calculated from 25 for theory, as well as for practical, with an average of 15.

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Book Butter and Ice Cream (Al-Samarrai and others)
Main references (sources)	Dairy ice cream (slim)
Recommended books and references (scientific journals, reports...)	Many books and magazines, including Technology of Cheese Making Journal of Dairy Science
Electronic References, Websites	Internet sites such as Google

Instructor of theoretical part

Dr. Azhar ibrahim shukr

Instructor of practical part

Israa maan ahmed

Chairman of the scientific committee

Prof. Dr. Moafak mahmood ahmed

Head of the department of Food science

Prof. Dr. Sumaya khalaf badawi