Course Description Form

Course Name:

Butter and ice cream

Course Code:

BUIC471

3. Semester / Year:

First semester (fall) / 2024-2025

4. Description Preparation Date:

1/2/2025

5. Available Attendance Forms:

Present and integrated

6. Number of Credit Hours (Total) / Number of Units (Total)

30 hours/30 units+ 45 hours/

7. Course administrator's name (mention all, if more than one name)

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8. Course Objectives

Theoretical:

- * 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

practical:

 Enabling the student to learn about th most important laboratory methods for producing butter and ice cream



and ice cream

9. Teaching and Learning Strategies

Theoretical:

practical:

the use of

Interactive lecture w Assigning group work and revealing

presentations -

students' skills - assignment

dialogue Discussion brainstorming

Assignments to write a report for

each experiment

assigning

tasks and

reporting.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2Theoretical 3 practical	Theoretical a 1: Learn about butter, its standard properties, how it is made, the defects that occur in butter, how to make margarine and differentiate it from natural butter, and how to convert butter into ghee. Practical	Theoretical Historical overview of the butter industry - Definition of butter Practical: Milk separation	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
		b 1: Explain the scientific basis for the milk sorting process, the method of estimating acidity and how to neutralize it in cream, and the steps of butter making.			
2	2Theoretical 3 practical	Theoretical a 1: Learn about butter, its standard	Theoretical: General steps for making/separating	theoretical: Methods	Short exams, assignments, an

		properties, how it is made, the defects that occur in butter, how to make margarine and differentiate it from natural butter, and how to convert butter into ghee. Practical b 1: Explain the scientific basis for the milk sorting process, the method of estimating acidity and how to	butter Practical: Separating milk	Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	discussions
	week Miles	neutralize it in cream, and the steps of butter making.	on control 1 to 13=22 coldina coperace Te	atmont G	
3	2Theoretical 3 practical	a 1: Learn about butter, its standard properties, how it is made, the defects that occur in butter, how to make margarine and differentiate it from natural butter, and how to convert butter into ghee. Practical b 1: Explain the scientific basis for the milk sorting process, the method of estimating acidity and how to neutralize it in cream, and the steps of butter making.	Theoretical: Pasteurization of cream prepared for butter production Practical: Chemical tests of cream	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 a 1: Learn about butter, its standard properties, how it is	Theoretical Disadvantages of Butter	theoretical: Methods Audio	Short exams, assignments, and

		that occur in butter,		On the	discussions
		how to make	Beactical	board	
		margarine and	Practical	Dialogue	
		differentiate it from	Checking the Acidity	style Direct	
		natural butter, and	of Cream and	style bliect	
		how to convert	Implementing Acid	Practical:	
		butter into ghee.	Adjustment with	Assigning	
		Practical	Different Alkalis	tasks and reporting	
		b 1: Explain the		reporting	
		scientific basis for	1 11		
		the milk sorting			
	1 1 1 1 1 1	process, the	× 1 100		
	analesa, nesarra	method of	0 - 1 U		
	DG_3c 1	estimating acidity and how to	te way		
	rjahrulo I	neutralize it in	e Sir in in suff		
	Later 1	cream, and the	ned terms		
	10, 481	steps of butter	out mitution		
	e protect	making.	I Agent Apr		
7	2Theoretical	Theoretical	Theoretical	theoretical:	Short
	3 practical	a 1: Identify butter,	Ghee	Methods	exams,
		its standard	The state of	Audio	assignments, and
	2 3 4 7 7 1	properties, how it is		Writing style	discussions
		made, and the		On the	discussions
		defects that occur	Practical	board	
		in butter. Understand how to	Want Cit	Distance	
		make margarine	Butter Making	Dialogue style Direct	
		and differentiate it	AND STORY	style bliect	
		from natural butter,		Practical:	
		and how to convert	1	Assigning	
	or "-graout"	butter into ghee.	38 x 6 x 6 x 6 x 6 x 6 x 6 x 6 x 6 x 6 x	tasks and	-1.
		Market associated and had	Storma N. A. a.	reporting	
	in the second of	tuasa and 1 south	seder or or		
	Albert Victoria	Practical	Bride get to		
	g grad XX 1	b 2: Apply the steps	ben awan		
	All n Q' '	for making butter,	e, ad light		
	IN SACEL	water ice cream,	cadocegario		
	granding Translation to the	and cream.	of the selfer		
	2Theoretical	Theoretical	Theoretical	theoretical:	Short
	3 practical	a 2: Familiarize	Historical overview of	Methods	exams,
	graditation (A)	yourself with the	ice cream - Definition	Audio	assignments, and
		types of dairy ice	of ice cream	Writing style	discussions
	Marine San	cream and the	la de la contracta	On the	2.553500113
		ingredients used in	INDUSTRIES IN THE STATE OF THE	board	
		its production, and identify the	Palitic Se	Dialogue	
		different types of	amelia finiti	Dialogue style Direct	
		ice cream and their	007	style Direct	
		6,	و جامعة الموصل		
		ę.	فكلية الزراعة والغابات		
		1			
			(*(E)(*)		

		manufacturing	Practical	Practical:	
		methods.	1	Assigning	
			Butter making	tasks and	
		1	S 11 111 1	reporting	
		Practical			
		Practical			
		b 2: Apply the steps	Part Control		
		for making butter,			
		water ice cream,	Losetto 'c		
		and cream ice	L		
		cream.	48		
,	2Theoretical	Theoretical	Theoretical	theoretical:	Short
	2 marables I		P. SERVINGE	14 thoda	
	3 practical	a 2: Familiarize	Nutritional value of	Methods	exams,
		yourself with the	ice cream	Audio	assignments, and
		types of dairy ice	Practical	Writing style	discussions
		cream and the	The second second	On the	
		ingredients used in its production, and	Ghee (free fat)	board	
		identify the	Al for El place		
		different types of	Selected 1	Dialogue	
	A Transfer	ice cream and their	Englished I law is a	style Direct	
		manufacturing	1	Practical:	
	1 C + C + C	methods.	Algorithm	Assigning	
	2.70	metrious.	2000	tasks and	
	aute realmaVe	0 4 8 9 9		reporting	
	Luckii I	Practical	DIBE CALL OF THE PARTY OF THE P		
	lan art	Jackbart 1	Prostruit et y		
		b 2: Apply the steps	Mari Euro (1)		
	ACTIVE AND	for making butter,	erm essm		
	PSEUS SAVER	water ice cream,			
	loso sar^ ,	and cream ice	Hand of Car		
	en legitra in	cream.	swenthra		
0	2Theoretical	Theoretical	Theoretical	theoretical:	Short
	3 practical	a 2: Familiarize	Ingredients used in	Methods	exams,
	3	yourself with the	the manufacture of		assignments, and
		types of dairy ice	dairy and non-dairy	Audio	assignificatio, and
		cream and the	ice cream	Writing style	discussions
		ingredients used in	navagon ki i	On the	
		its production, and	Practical	board	
		identify the	Creamy ice cream	Dialogue	
		different types of		style Direct	
	Jacob on Isria T	ice cream and their		The Court of the C	. 91
	bloom 5400 - Epigrafi nog	manufacturing	artera callos (Practical:	
	, Lumertafi	methods.	ne through	Assigning	
	Crivil A	marratic sin	all trocally till	tasks and	
	Mg Rough and	un#	itsus musici I	reporting	
	1800	Practical	ELD CONTRACTOR		
	1902	h 2. Apply the stone	Contract Pil		
	lauces/f	b 2: Apply the steps			
	to in the	for making butter, water ice cream,	10° 11(40) (1.10)		1
		and cream ice	Page to any		
		and cream .se			1

	1.11	cream.			
11	2Theoretical	Theoretical	Theoretical	theoretical:	Short
	3 practical	a 2: Familiarize	Properties of Mixtures	Methods	exarns,
		yourself with the			assignments, and
		types of dairy ice		Audio	discussions
		cream and the	Practical	Writing style On the	discussions
		ingredients used in	Calculation than	board	
		its production, and	Calculating the Ingredients of a		
		identify the	Creamy Ice Cream	Dialogue	
		different types of	Mixture	style Direct	
		ice cream and their manufacturing	A STATE OF THE STA	Practical:	
		methods.	March 1 V N	Assigning	
		methods.		tasks and	
		if thought	Carried and a second	reporting	
	Street, y	Practical	n witter in	provide f	
	ing g ¹ , in segg	e dring of all of	(rav (m))		
	1 100 100 100 100 100 100 100 100 100 1	b 2: Apply the steps	1 (60 - 21/4)		
	with a suit	for making butter, water ice cream,	18 18 12 18 1 10 18 18 18 18 1		
	175.65	and cream ice	rai mesesserii Besterii ette		
		cream.	V 1000 0 0 0		1
	TOTAL STATE OF THE	and the trivial and the second	Theoretical	theoretical:	Short
2	2Theoretical	Theoretical	Theoretical		
	3 practical	a 2: Familiarize	How to Make Milk Ice	Methods	exams,
	Enright C.	yourself with the	Cream	Audio	assignments, and
	2 C E 2 = 1	types of dairy ice	Practical	Writing style	discussions
	10.00	cream and the		On the	
		ingredients used in its production, and	Calculating the	board	
		identify the	Ingredients of a Creamy Ice Cream	Dialogue	
		different types of	Mixture	style Direct	
		ice cream and their	Mixture		
		manufacturing	minera bita	Practical:	Tr.
		methods.	150-911 <u>.</u>	Assigning	
	Sel at 150	English Count	Line Len	tasks and	1.5
				reporting	
	gpodiuM (10h	Practical	THE HANDS	1 7 7	
	CASTO	b 2: Apply the steps	eron dem	1	
	de graphic	for making butter,	See Juliano		
	arts in Street	water ice cream,	deters to		
	biand	and cream ice	a software at 1		
	eugoic.d .	cream.	m Baranan a		
3	2Theoretical	Theoretical	Theoretically	theoretical:	Short
	2 practical	a 2: Familiarize	Honestly, the milky ice	Methods	exams,
	3 practical	yourself with the	cream	Methous	assignments, and
	bi. 6 2/8/64	types of dairy ice	Cicum	Audio	assignments, and
	or thags	cream and the	Practically	Writing style	discussions
		ingredients used in	Calculating the	On the	
	1	its production, and	ingredients of a milky	board	1

		identify the different types of ice cream and their manufacturing methods.	ice cream mix	Dialogue style Direct Practical: Assigning tasks and reporting	
		b 2: Apply the steps for making butter, water ice cream, and cream ice cream.			
14	2Theoretical 3 practical	Theoretical a 2: Familiarize yourself with the types of dairy ice cream and the ingredients used in its production, and identify the different types of ice cream and their manufacturing methods. Practical	Theoretical Soft Ice Cream/Sherbet/Water Ice Cream Problem Solving Practical Water Ice Cream	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical: Assigning tasks and reporting	Short exams, assignments, and discussions
		b 2: Apply the steps for making butter, water ice cream, and cream ice cream.	auteria var at journal 1 maetrelija t ministration i uterialiset		
15	2Theoretical 3 practical	Theoretical a 1: Learn about butter, its standard properties, how it is made, and the defects that occur in butter. Learn how to make margarine and differentiate it from natural butter, and how to convert	Theoretical Foam Theories Practical Problem Solving	theoretical: Methods Audio Writing style On the board Dialogue style Direct Practical:	Short exams, assignments, and discussions
	BUCH TOWN CONTROL OF SHORT OF	butter into ghee. Practical d 1: Communicate	a fine troy be to except constructed the filestages to the constructed	Assigning tasks and reporting	

		with a dairy factory.			
1	Course Evaluation		Appendix of the contract of th		and the second second second second
	Calendar methods		Calendar date (week)	Class	Relative weight %
	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
1	Short test (2) Quiz		The fourteenth week	2	2
5	Short test (3) Quiz		The fifteenth week	1	1
5	Semester test (1)	75.000	the sixth week	7.5	7.5
7	Semester test (2)	Visi Min M. V	The eleventh week is difficult	7.5	7.5
В	Final theoretical test		Final semester exams	40	40
9	Laboratory application	(1.11) (1.19) A.	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	han I want	100	100%	100%

monthly, or written exams, reports etc	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	The Book of Butter and Ice Creams (Al- Samarrai et al.). Mosul University Publications, Iraq.
Main references (sources)	- Dairy Ice Cream (Salim)
Recommended books and references (scientific journals, reports)	Numerous books, journals, and scientific articles
Electronic References, Websites	Google Search

Lecturer of theoritical part dr. Azhar Ibrahim shukr

: Assinant Lectuer israa maan ahmed
Chairman of the Scientific Committee: A.Prof.Dr. Taha Mohammed Taqi

Head of the Food Science Department: A.Prof. Dr. Taha Mohammed Taqi