AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Dairy Technologies								
Course Code	VBH568		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Milk powder, butter and ice cream production technologies								
Course Content	Milk powder technology, butter production and ice cream production technologies								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study								
Name of Lecturer(s)	Lec. Pelin KOÇAK KIZANLIK, Prof. Filiz KÖK								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Tekinşen C., Tekinşen K., Dondurma, 2007
2	Akın N., Dondurma Bilimi ve Teknolojisi, 2009.
3	İnal, T. Süt ve Süt Ürünleri Hijyen ve Teknolojisi
4	Üçüncü, M. Süt bilimi, 2013.

Week	Weekly Detailed Course Contents	
1	Theoretical & Practice	Classification and composition of butter & Introduction of laboratories and instruments that conduct the butter analysis
2	Theoretical & Practice	Raw materials and Production stages of butter & Butter-making (for breakfast)
3	Theoretical & Practice	Starter cultures used to be manufactured of butter and Elaboration of butter & Butter-making (for cooking)
4	Theoretical & Practice	Common defects in butter; Physical, Chemical and Microbiological defects & The preparation of chemical materials necessary for chemical analysis of butter and The analysis of ash, humidity and pH of butter
5	Theoretical & Practice	Microbiological and Chemical criteria notification for butter & Sterilization of materials and the preparation of media used for microbiological analysis
6	Theoretical & Practice	Evaluation of the ice-cream history, classifying of ice-cream & Introduction of laboratories and instruments that conduct the icecream analysis
7	Theoretical & Practice	Properties of the milk used in making ice cream and The steps of ice-cream production & Ice-cream making (plain)
8	Intermediate Exam	Midterm exam
9	Theoretical & Practice	Common defects of ice-cream & Microbiological and chemical analysis in ice cream
10	Theoretical & Practice	The importance of the personal hygiene at ice-cream producing plant & Preparation of media used in microbiological analysis
11	Theoretical & Practice	Introduction to milk powder technology & Introduction of laboratories and instruments that conduct the milk powder analysis
12	Theoretical & Practice	Milk powder production steps; Spraying and roller milk powder technology & The preparation of chemical materials necessary for chemical analysis of milk powder and The analysis of ash and humidity of milk powder
13	Theoretical & Practice	Common defects of milk powder and Microbiological and Chemical criteria notifications of milk powder & Preparation of media used in microbiological analysis and detection of the total mesophilic aerobic and anaerobic counts in the milk powder
14	Theoretical & Practice	Aflatoxin in dairy products and it's relationship with public health & Aflatoxin M1 detection in milk products
15	Theoretical & Practice	Criteria notifications for Aflatoxin M1 and Status in the dairy products in our country and around the world & The Determination of Aflatoxin M1 Levels in baby food
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Midterm Examination	1	16	1	17
Final Examination	1	26	1	27
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To have knowledge about dairy technologies
2	To learn chemical tests applied to dairy products
3	To learn microbiological analysis of dairy products
4	Practicing in the production of butter and ice cream
5	The history of the ice-cream and the milk quality attributes to be processed to ice-cream
6	Common defects in butter and their Prevention

Programme Outcomes *(Food Hygiene and Technology (Veterinary Medicine) Master)*	
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Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5	L6
P1	5	5	5	5		
P2					5	
P3	5	5	5	5	5	
P4	5	5	5	4	3	
P5	5	5	5	5	4	
P6						5
P7	5	5	5	5		5
P8						5
P9	5	5	5	5		
P10	4	4	4	4		
P11		5	5	3		
P12		4	4	3		4
P13	4	4	4	5		3