



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
VETERINARY FOOD HYGIENE AND TECHNOLOGY
FOOD HYGIENE AND TECHNOLOGY (VETERINARY)
FOOD HYGIENE AND TECHNOLOGY (VETERINARY) MASTER
COURSE INFORMATION FORM

Course Title	Dairy Technologies								
Course Code	VBH568		Course 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)									

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
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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) 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

