AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Cheese Production Technologies							
Course Code		VBH637		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	5	Workload	125 *(Hours)*	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To have a detailed knowledge of the coagulation mechanism of milk, cheese production technology and cheese varieties							
Course Content		Nutritional value of cheese, biochemical structure of milk proteins, milk coagulation mechanism, cheese production, cheese varieties, soft, semi-hard, hard and very hard cheese 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	Coagulation Properties of Milk
2	Dairy technology

Week	Weekly Detailed Course Contents	
1	Theoretical	Nutritional composition and components of cheese, the importance of cheese in nutrition
	Practice	Chemical quality tests in milk
2	Theoretical	Chemistry of milk proteins
	Practice	Milk reduction tests
3	Theoretical	Coagulation mechanism of milk proteins
	Practice	Antibiotic residue tests in milk
4	Theoretical	Enzyme-induced coagulation and Acid-induced coagulation
5	Theoretical	Effect of milk hygiene on cheese quality
	Practice	Determination of moisture and ash in cheese
6	Theoretical	Processes applied to milk before cheese production
	Practice	Determination of acidity in cheese
7	Theoretical	Starter cultures used in cheese production
8	Theoretical	Midterms examination
	Intermediate Exam	Midterms examination
9	Theoretical	Cheese production process
	Practice	Determination of protein in cheese
10	Theoretical	Hard cheese production
	Practice	Determination of fat in cheese
11	Theoretical	Semi-hard cheese production
	Practice	Determination of aerobic mesophilic bacteria, coliforms, yeast and mold in cheese
12	Theoretical	Cheeses made from sour milk
	Practice	Tests of dosage and strength rennet in cheese production
13	Theoretical	Soft cheese production
14	Theoretical	Fresh cheese production
	Practice	White cheese production
15	Theoretical	Melting and cream cheeses production
	Practice	Curd cheese production

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	10	0	3	30
Reading	10	0	2	20
Midterm Examination	1	11	1	12
Final Examination	1	20	1	21
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To learn the composition and component of raw milk
2	To learn coagulation mechanism of milk proteins
3	to learn about how to adjust dosage and strength rennet in cheese production
4	To learn cheese types and cheese technology
5	To learn the physical, chemical and microbiological defects in cheese
6	To ensure food safety in cheese production ve HACCP application

Programme Outcomes *(Food Hygiene and Technology (Veterinary Medicine) Doctorate)*	
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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	4	5	5	4
P2	3					3
P3	4	4	4	4	4	4
P4	5	5	5	5	5	5
P6	5	5	5	5	5	5
P7	5	5	5	5	5	5
P9	5	5	5	5	5	5
P10	4	4	4	4	4	4
P11					4	
P12					4	
P13	4			4	4	5