



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Milk and Dairy Product Processing							
Course Code		ST101		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	2	Workload	56 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The chemical structure of milk, composition, quality of raw milk, drinking milk, technology, cheese, yogurt, butter, milk powder, fermented milk products and ice cream manufacturing processes							
Course Content		Milk composition, nutritional value, the general properties, technological processes applied to milk, the basic tools and equipment used in dairy companies. Also drinking milk, cheese, yogurt, butter, milk powder, fermented milk products and ice cream production technologies are described.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Metin,M.1998.Süt teknolojisi.Ege Üni.Mühendislik Fakültesi yayınları No:33 İzmir
2	Yetişmeyen A.1997 Süt Teknolojisi. Ankara Üni.Ziraat Fakültesi Yayın No:1482 Ankara
3	Üçüncü M.2002.Süt Teknolojisi. Ege Üni.Mühendislik Fakültesi yayınları No:32 İzmir.

Week	Weekly Detailed Course Contents	
1	Theoretical	Composition and Properties of Milk, Factors influencing both the amount and composition of milk, physicochemical properties of milk
2	Theoretical	Collection of milk and acceptance of the dairy plant
3	Theoretical	Pre-technological processes applied to raw milk
4	Theoretical	Market milk technology (pasteurized market milk)
5	Theoretical	Market milk technology (sterilized market milk)
6	Theoretical	Cheese Technology 1
7	Theoretical	Cheese Technology 2
8	Intermediate Exam	Midterm exam
9	Theoretical	Butter Technology
10	Theoretical	Yoghurt Technology
11	Theoretical	Drinking yoghurt ve Fruit yoghurt Production Technology
12	Theoretical	Fermented Products Manufacturing Technology (Kefir, kıymız, etc.).
13	Theoretical	Evaporated and Dried Milk Products Technology
14	Theoretical	Ice-cream technology
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	1	5	1	6
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				56
[Total Workload (Hours) / 25*] = ECTS				2

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	Know the composition of milk and milk processing techniques
2	Know the stages of the process of dairy products
3	Learn the stages of the process of dairy products
4	Have information about milk and dairy products
5	Have knowledge about quality criteria of milk and dairy products.

Programme Outcomes (Dairy Technology)

1	Having sufficient infrastructure in basic sciences and engineering subjects and ability to use the theoretical and applied info instantly in this field.
2	Determining the modern techniques, tools and information technologies required for applications related with his field and ability to use them efficiently
3	Ability for planning, projecting, and designing, following up, analyzing and finding target-driven solutions related with his field
4	Ability to have professional ethic and awareness.
5	Ability to work, decide, express opinions orally and in written individually
6	Ability to participate team studies, taking responsibility, making leadership.
7	Ability to conceive Atatürk's principles and reforms, to communicate in Turkish and foreign language.
8	Ability to comprehend the necessity to learn for a life time, to monitor developments in science and technology and continuously renew himself.
9	Having sufficient level of information about production and quality control of milk and dairy products and also product development, increasing product quality and food security fields.
10	Ability to detect, define, solve problems related with his field and to select and apply suitable methods and modeling techniques for this purpose.
11	To be conscious about workplace applications, worker health, work security and environment subjects, to have knowledge about legal results of the engineering applications related with his subject.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	5	5	5		3
P2	5	5	5	5	5
P3			5		4
P7			3		
P8			3		
P9	4	4	4		5
P10			5		

