



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Fermented Dairy Products Technology							
Course Code		ST313		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	102 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of the course is to introduce the yogurt and fermented dairy products and to teach the technology of yogurt manufacture and yogurt biochemistry							
Course Content		The history, classification and properties of yoghurt and related fermented dairy products, Detailed explanation of yogurt technology and biochemistry, Manufacturing technology of yogurt related fermented dairy products							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), 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	1. DERS KİTABI: 1. Tamime, A. Y., Robinson, R. K (1999) Yoghurt Science and Technology, Woodhead Publishing Ltd., UK.
2	2. Özer, B. (2006) Yoğurt Bilimi ve Teknolojisi, Sidas Medya LTD. Çankaya, İzmir. YARDIMCI KİTAPLAR: 1. Tamime, A. Y. (2006) Fermented Milks, Blackwell Science Ltd., UK.

Week	Weekly Detailed Course Contents	
1	Theoretical	The history and classification of yoghurt and related fermented dairy products
2	Theoretical	The properties of milk used for yogurt and related fermented dairy products
3	Theoretical	Technological processes applied to milk for the manufacture of yogurt and related fermented dairy products
4	Theoretical	The standardization of milk for the manufacture of yogurt and related fermented dairy products (milk fat standardization)
5	Theoretical	The standardization of milk for the manufacture of yogurt and related fermented dairy products (non fat milk solids standardization)
6	Theoretical	Homogenization and pasteurization processes of milk for the manufacture of yogurt and related fermented dairy products
7	Theoretical	Starter culture utilization and culture properties in yogurt and related fermented dairy products
8	Intermediate Exam	Midterm exam
9	Theoretical	Incubation and cooling in yogurt and related fermented dairy products
10	Theoretical	Packaging in yogurt and related fermented dairy products
11	Theoretical	Formation of yogurt gel and yogurt biochemistry
12	Theoretical	Flavourings in yogurt and related fermented dairy products
13	Theoretical	Fruit yogurt
14	Theoretical	Other yogurt and related fermented dairy products -Probiotic yogurt
15	Theoretical	Kefir, kıymız
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Laboratory	14	0	2	28
Individual Work	14	0	1	14
Midterm Examination	1	0	2	2



Final Examination	1	0	2	2
Total Workload (Hours)				102
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	1. The knowledge on the kinds and properties of fermented dairy products
2	2. The ability to understand the technological processes in yogurt manufacture
3	3. The ability to provide the standardization in yogurt manufacture
4	4. The ability to understand the yogurt biochemistry
5	5. The ability to relate between the knowledge on the yogurt technology and product quality

### 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	5	5
P9	5	5	5	5	5

