



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Butter Technology							
Course Code		ST414		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 productions of cream and butter and influencing factors of this procces will learn, they will be able to realize their individual production conditions							
Course Content		Standards of cream and butter, significance in terms of composition and nutrition, raw metarial characateristic and relationship with production procces, packaging and preservation of butter and spoilage and defect are investigated.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Oysun, G. 1999. Tereyağı Teknolojisi. E.Ü.Z.F Yay. Teksir no:38/3, 86s
2	Atamer, M. 1983. Tereyağ Teknolojisi. A.Ü.Z.F. Yay. No:1313. Ankara
3	Tekinşen, C. 1996. Süt Ürünleri Teknolojisi. Selçuk Üniv. Vet.Fak.Yay. No: ISBN:9759567817, 326s.

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of cream and butter, standards
2	Theoretical	Raw metaterials characteristic
3	Theoretical	Produciton procces, desing of plants
4	Theoretical	Pasteurization and deodorization
5	Theoretical	Technique of physical maturation
6	Theoretical	Physical maturation and desing of plants
7	Theoretical	Biological maturation
8	Intermediate Exam	Midterm Exam
9	Theoretical	Effects of biological maturation and desing of plants
10	Theoretical	Churning and influencin factors of churning
11	Theoretical	Tuzlama yöntemleri, malakse, tereyağında kullanılabilecek katkı maddeleri Salting methods, malakse, ingredients of butter
12	Theoretical	Continu butter prodution, efficiency (output)of butter, packaging
13	Theoretical	Production of coffe cream and roll cream
14	Theoretical	Productions of whipped cream
15	Theoretical	Quality, preservation, spoilage and defect of Butter,
16	Final Exam	Term Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	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	Student should be able to: have information about legal regulation of Cream and Butter
2	have sufficient information compositions and nutritional value of Cream and Butter
3	explain production processes and influencing factors of production processes
4	express seasonal production processes of Butter
5	have deficient knowledge about preservation of Butter
6	explain quality of Butter
7	evaluation spoilage and defects of butter
8	have knowledge production of cream yields

### 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	L6	L7	L8
P1	5	5	5	5	5	5	5	5
P9	5	5	5	5	5	5	5	5

