



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Food Protection							
Course Code		ST317		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	80 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		It is important to explain the importance of conservation techniques in maintaining quality of food, to inform students about effective and newly developed preservation techniques, and to determine the most appropriate containment practices for different foodstuffs.							
Course Content		Conservation techniques in maintaining quality of food, effective and newly developed preservation techniques, and appropriate containment practices for different foodstuffs.							
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. Food Processing Technology. P.J.Fellows, CRC Press, 2010., 2nd Edition
2	2. Baysal,T.,İçier,F. Gıda Mühendisliğinde Isıl Olmayan Teknolojiler, Nobel Akademik Yayıncılık, 2012
3	3. Barbosa-Canovas,G.V.,Tapia,M.S.,Cano,M.P. Novel Food Processing Technologies, CRC Press,2005

Week	Weekly Detailed Course Contents	
1	Theoretical	Basics and Processes of Food Processing
2	Theoretical	Basics and Processes of Food Processing
3	Theoretical	Food processing methods
4	Theoretical	Food processing methods
5	Theoretical	Basics of Food Conservation, Biochemical, Rheological and Microbial Changes during Process and Shelf Life
6	Theoretical	Basics of Food Conservation, Biochemical, Rheological and Microbial Changes during Process and Shelf Life
7	Theoretical	Traditional Storage Techniques
8	Intermediate Exam	Mid-term Exam
9	Theoretical	Traditional Storage Techniques
10	Theoretical	Heat treatment based preservation methods (Evaporation, drying, pasteurization, sterilization, spray-dried etc.).
11	Theoretical	Heat treatment based preservation methods (Evaporation, drying, pasteurization, sterilization, spray-dried etc.).
12	Theoretical	Cold Process Storage Methods (Freezing, Lyophilization etc.)
13	Theoretical	Storage Techniques Based on Packaging Methods (Active Packaging, Smart Packages, etc.)
14	Theoretical	Modern Protection Techniques
15	Theoretical	Modern Protection Techniques
16	Final Exam	Modern Protection Techniques

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Assignment	2	3	1	8
Term Project	1	6	0	6
Quiz	2	0	1	2
Midterm Examination	1	3	1	4



Final Examination	1	3	1	4
Total Workload (Hours)				80
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	1. To know the composition and properties of food
2	2. To know how to treat food
3	3. To learn the techniques that are effective in food preservation
4	4. To know the most appropriate preservation method for food varieties
5	Learning of the Storage Techniques Based on Packaging Methods

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	4	4	4	4	4
P2	4	4	4	4	4
P3	4	4	4	4	4
P5	4	4	4	4	4
P6	4	4	4	4	4
P7	4	4	4	4	4
P8	4	4	4	4	4

