



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Brine Technology							
Course Code		MSİ207		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		Learn the brine processes							
Course Content		Basic concepts in brine technology, production lines of different brine products and working principles of equipment, quality analysis of brine products.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Tetik, Derya, 2008. Lecture notes, İzmir
2	Olive Technology, İzmir.
3	Pickle Technology, İzmir
4	Vinegar Technology, İzmir.

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic brine concepts, the importance of traditional brine products in nutrition
	Practice	Preparation of brine
2	Theoretical	Alcohol and acid fermentations, salt and sugar concentration, temperature effects
	Practice	Ph and acidity determination
3	Theoretical	Main characteristics of fruits and vegetables in processing of brine products
	Practice	Determination of salt in brine products
4	Theoretical	Production and packaging of various types of green olives
	Practice	Green olive production methods
5	Theoretical	Production and packaging of green olives
	Practice	Chemical analysis in table green olives
6	Theoretical	Production and packaging of pickles
	Practice	Pickles from various vegetables
7	Theoretical	Production and packaging of pickles
	Practice	Pickles from various vegetables
8	Intermediate Exam	Midterm
9	Theoretical	Vinegar Production Technology
	Practice	Determination of acidity in vinegar



10	Theoretical	Working principle of brine
	Practice	HACCP in brine
11	Theoretical	Working principle of brine
	Practice	Sensory analysis of brine products
12	Theoretical	Pickle analysis
	Practice	Various chemical and microbiological analyzes in pickles
13	Theoretical	Green and black olive analysis
	Practice	Color analysis in olives
14	Theoretical	Green and black olive analysis
	Practice	Determination of dry matter and moisture in olives
15	Theoretical	General evaluation
	Practice	General evaluation
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Individual Work	14	0	2	28
Midterm Examination	1	7	1	8
Final Examination	1	7	1	8
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To comprehend the basic concepts in brine technology
2	To understand the effects of production parameters and techniques on end product quality in brine products
3	Identify the problems that may occur in the production and offer solutions
4	To be able to comprehend the production lines of different brine products and the working principle of equipments
5	To be able to analyze the production quality and to evaluate the results according to the relevant legal regulations
6	To design the current system for a process given in brine processes

Programme Outcomes (Fruit and Vegetables Processing Technology)

1	To be able to understand social, cultural and social responsibilities and to have the ability to follow national and international contemporary
2	In line with the principles and reforms of Atatürk; Adopting the national, moral, spiritual and cultural values ??of the Turkish Nation, open to universal and contemporary developments, the Turkish language is a rich, rooted and productive language; love and awareness of language; to have the ability to use the foreign language sufficiently and with the habit of reading and professionally.
3	To know the basic hardware units and operating systems of computer, internet to be able to prepare documents, spreadsheets and presentations on the computer by using office programs
4	Gains the theoretical and practical knowledge at the basic level in mathematics, science and professional fields
5	Recognize and analyze the problems with the knowledge of fruit and vegetable technology in the field, interpret the data and propose solutions.
6	According to the prepared work plan and program in laboratories, it can carry out the necessary works to obtain the desired quality product.
7	To have professional and ethical responsibility in business life.
8	It is open to development and change, follows scientific social and cultural innovations and constantly improves itself.



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	2	2	3	2	3	3
P2	2	2	2	2	3	3
P3	2	3	1	2	2	4
P4	4	4	4	4	3	4
P5	5	5	5	5	3	5
P6	2	2	3	2	3	3
P7	2	2	3	2	3	3
P8	3	3	4	3	3	4

