AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Box Conservation						
Course Code	MSİ212		Couse Level	Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	To make necessary preparations for the production of canned vegetables and fruits and before and after canned heat treatment for fruit and vegetables (filling, filling liquid preparation and filling, air extraction and closing).						
Course Content	Pretreatment of fruits and vegetables, filling, exhaust closure, clamp control, packaging, heat treatment, fruit and vegetable canned food production.						
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	Cemeroğlu, B., Özkan, M., Karadeniz, F., Yemenicioğlu, A., 2004. eniz Fruit and Vegetable Processing Technology B., 1-2. Volume, Editor: Cemeroğlu, B. Food Technology Association Publications, Ankara.
2	Cemeroğlu, B., Karadeniz, F., 2001. Fruit Juice Technology ", Food Technology Association Publications, Ankara
3	Acar, J. and Cemeroğlu, B., 1998. II Fruit and Vegetable Technology ve, Volume II, Hacettepe University, Faculty of Engineering Publications, Ankara.

Week	Weekly Detailed Course Contents	
1	Theoretical	Fruit vegetable structure and composition
	Practice	General İnformation
2	Theoretical	Pretreatments
	Practice	Boiled Test
3	Theoretical	Pretreatments
	Practice	Shell peeling
4	Theoretical	Filling
	Practice	Introduction of autoclave
5	Theoretical	Exhaust and shut-off
	Practice	Exhaust process
6	Theoretical	Clamp control
	Practice	Canister control
7	Theoretical	Packaging materials
	Practice	Closing control in glass jar
8	Intermediate Exam	Midterm
9	Theoretical	Pneumatization - Sterilization
	Practice	Production of canned vegetables
10	Theoretical	Production of canned vegetables
	Practice	Production of canned vegetables
11	Theoretical	Production of canned fruits
	Practice	Production of canned fruits
12	Theoretical	Manufacture of ready-to-eat food
	Practice	Manufacture of ready-to-eat food
13	Theoretical	Considerations in quality canning production
	Practice	Calculation of Fo values

14	Theoretical	Solution of problems encountered in canning production
	Practice	Calculation of Po values
15	Theoretical	An overview
	Practice	Boxed microbiological analyzes
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	Understanding of the fundamentals of canning production
2	Understanding the fundamentals of heat treatment
3	Learning the basics of ready-made food technology
4	Understanding the causes of food spoilage
5	Understanding of important points for quality production

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
P1	2	2	2	4	4
P2	2	2	2	2	3
P3	3	3	2	1	2
P4	4	4	4	4	4
P5	5	5	5	5	5
P6	5	5	5	5	5
P7	5	5	5	5	5
P8	5	5	5	5	5