

FRUIT AND VEGETABLE PRODUCTS II

1	Course Title:	FRUIT AND VEGETABLE PRODUCTS II
2	Course Code:	GIDZ206
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	2
6	Semester:	4
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr. Gör. Dr. NEŞE ÖZMEN
15	Course Lecturers:	Meslek Yüksekokulları Yönetim Kurullarının Görevlendirdiği öğretim elemanları
16	Contact information of the Course Coordinator:	nozmen@uludag.edu.tr 0224 2961554 Uludağ Üniversitesi, MKP MYO Gıda Teknolojisi Programı, Mustafakemalpaşa, BURSA
17	Website:	
18	Objective of the Course:	To ensure that they understand the importance of heat treatment in terms of microorganisms and enzymes Teaching the differences between pasteurization, sterilization, commercial sterilization To teach the effect of heat treatment on the nutritional and sensory properties of fruits and vegetables. To ensure that they understand the raw materials used in the production of jam and marmalade, the production method and production errors. To learn drying of fruits and vegetables, drying methods, deterioration in dried products, packaging and storage conditions. Fruit juice, fruit nectar, fruit drink etc. To teach the differences between products and the stages of producing clear, pulpy fruit juice.
19	Contribution of the Course to Professional Development:	To provide professional development to graduate students in fruit and vegetable processing technologies
20	Learning Outcomes:	
	1	To be able to get information about technologies related to the processing of fruits and vegetables
	2	To be able to determine appropriate parameters in order to perform the processing steps related to the processing methods of fruits and vegetables and perform the process
	3	To understand the negative effects that may occur during and after the processing of fruits and vegetables and to gain knowledge that can prevent them or keep them at a minimum level;
	4	To be able to gain the ability to apply the process by understanding the canning technology, tomato paste, jam, marmalade, fruit juice and drying technologies among the fruit and vegetable processing methods;

		5	Performs quality control analyzes of fruit and vegetable products and be able to interpret the results and gain the ability to record information;		
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21	Course Content:				
	Course Content:				
Week	Theoretical		Practice		
1	Pretreatments applied to raw materials and filling in canning production		Production of seasonal canned vegetables or fruits		
2	Exhausting methods and seaming		Microbiological analyzes in canned foods		
3	Determination of heat treatment parameters and heat treatment		Physical and chemical analyzes in canned foods		
4	Deterioration of canned fruits and vegetables (microbiological, chemical and physical)		Physical and chemical analyzes in canned foods		
5	High pressure systems and equipment		tomato paste production		
6	The effect of high pressure on food components		Test (catalase) for blanching adequacy		
7	The effect of high-pressure on on microorganisms and enzymes		Tomato paste analysis		
Activites			Number	Duration (hour)	Total Work Load (hour)
Theoretical and marmalade and their preparation			14	2.00	28.00
Practicals/Labs			14	2.00	28.00
Self study and preperation			14	1.00	14.00
Homeworks			0	0.00	0.00
Projects			0	0.00	0.00
Field Studies			0	0.00	0.00
Midterm exams			1	10.00	10.00
Others			0	0.00	0.00
Final Exams			1	10.00	10.00
Total Work Load					90.00
Total work load/ 30 hr			1		3.00
ECTS Credit of the Course					3.00
			2. ISBN 975-98578-2-0. Başkent Kişce Matbaacılık. Ankara Jongen, W. 2002. Fruit and vegetable processing. Woodhead Publishing Ltd and CRC Pres, LLC. ISBN 0-8493-1541-7		
23	Assesment				
TERM LEARNING ACTIVITIES		NUMBE R	WEIGHT		
Midterm Exam		1	30.00		
Quiz		1	10.00		
Home work-project		0	0.00		
Final Exam		1	60.00		
Total		3	100.00		

Contribution of Term (Year) Learning Activities to Success Grade	40.00
Contribution of Final Exam to Success Grade	60.00
Total	100.00
Measurement and Evaluation Techniques Used in the Course	Measurement and Evaluation are carried out according to the principles of Bursa Uludağ University Associate and Undergraduate Education and Training Regulation.
24	ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	4	5	0	4	0	2	0	5	0	5	5	3	0	0	0
ÖK2	5	4	5	0	3	0	2	0	5	0	5	5	0	0	0	0
ÖK3	3	2	4	0	4	0	5	0	5	0	5	5	0	0	0	0
ÖK4	5	4	5	0	3	0	3	0	5	0	5	5	0	0	0	0
ÖK5	3	5	4	0	5	0	5	0	5	0	3	4	3	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							