JAM, MARMALADE AND JELLY TECHNOLOGY

1	Course Title:	JAM, MARMALADE AND JELLY TECHNOLOGY	
2	Course Code:	GSD4239-S	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	7	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:		
12	Language:	English	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. CANAN ECE TAMER	
15	Course Lecturers:	Doç. Dr. Gülşah Özcan Sinir	
16	Contact information of the Course Coordinator:	Bursa Uludag University Faculty of Agriculture Department of Food Engineering 16059 Görükle/Bursa Phone: 0224 2941501 Fax: 0224 2941402 etamer@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	• To give information about raw materials and equipments used in jam, marmalade and jelly production. • To teach processing technology of jam, marmalade and jelly • To give information about quality control in processing steps of jam, marmalade and jelly industry • To educate the student as a qualified food engineer in this area.	
19	Contribution of the Course to Professional Development:	Students taking this course will learn about jam, marmalade and jelly production technologies in detail.	
20	Learning Outcomes:		
		1	The students will be able to: • Know the properties of the raw materials used for jam-marmalade and jelly production
		2	The students will be able to: • Explain jam, jelly and marmalade production methods.
		3	The students will be able to: • Know the properties of the equipments used for jam-marmalade and jelly production
		4	The students will be able to: • Understand the scope of the material balances used for preparation of recipes.
		5	The students will be able to: • Understand the production errors.
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Materials used for jam, marmalade and jelly production.	
2	Preparation of jam, marmalade and jelly materials.	
3	Equipments used for processing.	
4	Material balances for preparation of repices.	
5	Case study	
6	Evaporation techniques.	
7	Cooling	
8	Packaging	
9	Review and consolidation of previous topics	
10	Technical visit	
11	Quality control of the products	
12	Production errors	
13	Diabetic jam production	
14	Similar products for diabetics	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
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	40.00	40.00
Total Work Load			92.00
Total work load/ 30 hr			3.07
ECTS Credit of the Course			3.00

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	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		For evaluation, a final exam is held together with midterm exam and relative evaluation is applied.

İşleme Teknolojisi -1, U.Ü.Ziraat Fak. Ders Notları No: 73. Bursa 192 s.

Kılıç, O., Başoğlu,F., Çoşar, O.U. 1997. Meyve ve Sebze İşleme Teknolojisi -2, U.Ü.Ziraat Fak. Ders Notları No: 74

Cemeroğlu, B., Yemenicioğlu, A., Özkan, M. 2001. Meyve Teknolojisi Derneği Yayınları No: 24 .Ankara. 328 s.

Teknolojisi ve Analiz Metodları. T.C. Gıda,– Tarım ve Hayvancılık Bakanlığı Gıda İleri Genel Müdürlüğü. Ayyıldız

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	3	4	4	5	3	3	4	4	4	4	4	0	0	0	0	0
ÖK2	5	4	5	5	4	3	4	4	4	5	4	0	0	0	0	0
ÖK3	5	4	5	5	4	4	4	4	4	5	5	0	0	0	0	0
ÖK4	5	5	4	5	4	3	3	4	4	4	5	0	0	0	0	0
ÖK5	4	5	4	4	5	3	3	4	4	4	5	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	**1 very low**		**2 low**			**3 Medium**			**4 High**			**5 Very High**				