AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Advanced Fruit and Vegetable Processing Technologies								
Course Code	GMP534		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	196 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to give information about fruit and vegetable products with their production technologies.								
Course Content	tomato paste production, jam-marmelade production, fruit juice production, canning technology								
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	60

Recommended or Required Reading	
1	Cemeroğlu, B. S. (2011). Meyve ve sebze işleme teknolojisi. Nobel Akademik Yayıncılık.

Week	Weekly Detailed Course Contents	
1	Theoretical	Production of tomato paste, ketchup and sauce
2	Theoretical	Concentration of pulp, evaporators and hot filling
3	Theoretical	Raw materials of jam and pectin structure
4	Theoretical	Formulation
5	Theoretical	Cooking with open tank and under vacuum
6	Theoretical	Types of fruit juices
7	Theoretical	Regulations for fruit juices
8	Intermediate Exam	Midterm exam
9	Theoretical	Enzymes and clarification in fruit juice production
10	Theoretical	Concentration of fruit juices and packaging
11	Theoretical	Filling into cans, exhausting and closing the lid
12	Theoretical	Types of autoclaves and pasteurizers
13	Theoretical	F value, z value and the term 12 D
14	Theoretical	Deterioration and threats in canned foods
15	Theoretical	Overall review

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	10	3	182
Midterm Examination	1	5	2	7
Final Examination	1	5	2	7
			Total Workload (Hours)	196
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Getting knowledge about foods produced from tomato.
2	Getting knowledge about jams and marmelades and their formulations.
3	Getting knowledge about fruit juice types and the production methods.
4	Getting knowledge about canned foods production and mathematical calculations.

5	Getting knowledge about drying of fruits and vegetables and dried fruits.

Programme Outcomes *(Food Engineering Master)*	
1	To provide further training and research opportunities to food engineers to meet the needs of the food industry
2	To develop and deepen the current and advanced knowledge in the field of food engineering with original thought and / or research at the level of expertise, based on the qualifications of the master
3	To identify, define, formulate and solve problems in applications related to Food Engineering and gain the ability to select and apply appropriate analytical methods and modeling techniques
4	To gain the ability to evaluate the accuracy of the data obtained from food analysis
5	To educate students having research, entrepreneur qualifications

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	3	3	3	3	3
P2	1				
P3	1				
P4	3	3	3	3	3
P5	1				