



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Fruit Vegetable Chemistry and Preservation Techniques							
Course Code		GMP533		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	194 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The purpose of this course is to detailed information about chemistry, biochemistry, cellular structures of fruit and vegetables and also to give information about general preservation techniques for fruits and vegetables.							
Course Content		Fruit and vegetable chemistry, cellular structures of fruit and vegetables, cold storage, freezing and drying of fruit and vegetables.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
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.
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Week	Weekly Detailed Course Contents	
1	Theoretical	Chemistry of fruit and vegetables
2	Theoretical	Chemistry of fruit and vegetables
3	Theoretical	Cellular structures of fruit and vegetables
4	Theoretical	Biological pathways in fruit and vegetables
5	Theoretical	Enzymatic reactions in fruit and vegetables
6	Theoretical	Non enzymatic reactions in fruit and vegetables
7	Theoretical	Degradation reactions in fruit and vegetables
8	Intermediate Exam	midterm exam
9	Theoretical	Cold storage of fruits and vegetables
10	Theoretical	Freezing of fruits and vegetables
11	Theoretical	Drying of fruits and vegetables
12	Theoretical	Students' presentations
13	Theoretical	Students' presentations
14	Theoretical	Students' presentations
15	Theoretical	Overall review

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	10	3	182
Midterm Examination	1	4	2	6
Final Examination	1	4	2	6
Total Workload (Hours)				194
[Total Workload (Hours) / 25*] = ECTS				8

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	getting knowledge about chemistry of fruit and vegetables.
2	Getting knowledge about biological pathways occurring in fruits and vegetables.
3	Getting knowledge about desired and undesired reactions in foods



4	Getting knowledge about preservation of fruits and vegetables.
5	Getting knowledge of the changes that occur during the preservation of fruits and vegetables.

**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				

