AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Olive Oil Chemistry and Technology								
Course Code	GMP517		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of the course is to investigate the structure of olive oil which has important position among other vegetable oils with its production technology and chemical composition; moreover to give information about processing techniques that keeps the minor compounds in their maximum concentration								
Course Content	Definition of olives, types of olives, olive oil harvets, transportaion of olives to mills, cleaning of olives, crushing, malaxation, olive oil extraction technique, olive oil storage and oxidation, refining of olive oil, evaluation of waste water and olive pomace, olive oil chemical composition, olive oil fatty acids and glycerides, olive oil phenolics, olive oil antioxidants, olive oil importance in terms of human health, olive oil standardization and quality criteria.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study								
Name of Lecturer(s)	Prof. Aslı YORULMAZ								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Assignment	2	20

Recommended or Required Reading	
1	Kayahan, M., 2002. Modifiye yağlar ve üretim teknolojileri, ODTÜ pres, Ankara
2	Boskou, D., 2006. Olive oil: Chemistry and Technology, AOCS press, ABD.

Week	Weekly Detailed Course Contents	
1	Theoretical	General information about olive
2	Theoretical	Olive oil processing technology: harvest, crushing
3	Theoretical	Olive oil processing technology: malaxation
4	Theoretical	Olive oil processing technology: pressing, centrifuge, sinolea
5	Theoretical	By products of olive processing
6	Theoretical	Olive oil composition; fatty acids and glycerides
7	Theoretical	Olive oil composition; sterols and hydrocarbons
8	Theoretical	Olive oil composition; tocopherols, waxes and lipochromes
9	Theoretical	Olive oil composition; flavour and aroma compounds
10	Theoretical	Importance of olive oil in terms of human health
11	Theoretical	Standardization and quality measures of olive oil; quality criteria
12	Theoretical	Standardization and quality measures of olive oil; purity criteria
13	Theoretical	Presentation of projects
14	Final Exam	Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	9	3	168
Midterm Examination	1	15	1	16
Final Examination	1	15	1	16
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Students learn the history of olive oil, the harvest and storage of olive fruits.
2	Students learn olive oil production technology, olive oil storage and oxidation.
3	Students learn the chemical composition and rafination of olive oil.
4	Students learn the classification and properties of olive oil, olive oil standardization and quality criteria.
5	Compare the traditional methods and technological methods in olive oil production in terms of oil quality and yield.

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