



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Edible Oil Refining Technology								
Course Code	GMP607		Course Level		Third Cycle (Doctorate Degree)				
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of the course is to give information about techniques used in refining of crude oils and the latest developments related to refining process.								
Course Content	Basic principles of refining, degumming, neutralization of crude oils, decolorization of crude oils, deodorization of crude oils.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Gunstone, F.D., Harwood, J.L., Dijkstra, A. J., 2007. The Lipid Handbook, CRC press, ABD.
2	Kayahan, M., 200. Yemelik Yağ rafinasyon Teknolojisi, TMMOB Gıda Mühendisleri Odası, Ankara.

Week	Weekly Detailed Course Contents & Teaching Methods	
1	Theoretical	Composition of crude oils
2	Theoretical	Basic principles of refining
3	Theoretical	Basic principles of refining
4	Theoretical	Degumming-I
5	Theoretical	Degumming-II
6	Theoretical	Neutralization-I
7	Theoretical	Neutralization-II
8	Theoretical	Exam
9	Theoretical	Decolorization-I
10	Theoretical	Decolorization-II
11	Theoretical	Deodorization-I
12	Theoretical	Deodorization-II
13	Theoretical	Determination of cost of refining
14	Theoretical	Determination of cost of refining
15	Theoretical	Presentation of projects
16	Theoretical	Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Assignment	2	28	2	60
Midterm Examination	1	29	1	30
Final Examination	1	39	1	40
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

\*25 hour workload is accepted as 1 ECTS



**Learning Outcomes**

1	
2	
3	
4	
5	

**Programme Outcomes (Food Engineering Doctorate)**

1	Developing and investigating the details of current and advanced knowledge in the field of Food Engineering by original thought and/or research on the level of expertise based on the graduate qualification and reaching to the original definitions that bring innovation to science.
2	Gain of ability of develop strategies, policies and implementation plans in the field of food engineering and evaluate the results within the framework of quality processes.
3	Gain of ability to perceive, design, evaluate and finish an original process by using and following the knowledge of the recent developments in the engineering fields.
4	Gain of ability of making critical analysis, synthesis and evaluation of ideas and development in food engineering field
5	Having advanced knowledge of food science and its applications based on doctoral level 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	

