



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Techniques For Food Analyses							
Course Code		GMP515		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of the course is to give theoretical and practical information about chromatographic techniques used for food analyses.							
Course Content		Parameters affecting column efficiency, kovatz index, Mc.Reynold coefficients, evaluation of chromatogram, capillary columns, detectors, possible mistakes in chromatography, gas chromatographic techniques in food analysis.							
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	Modern instrumentation methods and techniques, Chemical Analysis, Modern Instrumentation Methods and Techniques, Francis Rouessac and Annick Rouessac, second edition, Wiley, 2007
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Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and classification of chromatography
2	Theoretical	Chromatography theory
3	Theoretical	Column chromatography
4	Theoretical	Paper chromatography
5	Theoretical	Thin layer chromatography
6	Theoretical	Gas chromatography
7	Theoretical	Analytical gas chromatography
8	Theoretical	Preperative gas chromatography
9	Theoretical	Liquid gas chromatography
10	Theoretical	Liquid-liquid (Partition)chromatography
11	Theoretical	Liquid-solid (adsorption) chromatography
12	Theoretical	Ion exchange chromatography
13	Theoretical	Mass spectrometry
14	Final Exam	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 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	1	1
P2	3	3	3		
P3	3	3	3		
P4	3	3	3		
P5	3	3	3		

