

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Laboratory Te	chniques							
Course Code	KGT105		Couse Level		Short Cycle	Short Cycle (Associate's Degree)			
ECTS Credit 4	Workload	100 <i>(Hours)</i>	Theory	2	Practice	2	Laboratory	0	
Objectives of the Course	 to teach how to improve si food materials 	to reach infoi tudents skills i s	rmation r in analyz	egarding th ing and inte	e completion of rpreting data or	a given expe physical and	rimental task I chemical charact	eristics of	
Course Content	General rules of laboratory, Personal and laboratory safety, Preparation of sample and chemical solutions Conversion of concentration units, Organoleptic, gravimetric and titrimetric analyses								
Work Placement N/A									
Planned Learning Activities and Teaching Methods		Explana	ation (Prese	ntation), Experir	ment, Individu	al 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 Ç.Ü. Ders Kitabı No: 36. TÜRKER, İ. 1992. Laboratuvar Tekniği. A.Ü. Ders Kitabı No: 357
- 2 ALTAN, A. Laboratuvar Tekniği .1992. Ç.Ü. Ders Kitabı No: 36.

Week	Weekly Detailed Cours	Course Contents					
1	Theoretical & Practice	Introduction to laboratory, Types of food laboratories					
2	Theoretical & Practice	General laboratory safety precautions					
3	Theoretical & Practice	Laboratory materials (balances, pH meter, Oven, incubator, fume cupboard, water activity device, viscometer, picnometer, etc.)					
4	Theoretical & Practice	Safely working with chemicals, preparations before analysis and Operations after analysis					
5	Theoretical & Practice	Preparation of Solutions-calculation(%, molar, ppm etc. solutions)					
6	Theoretical & Practice	instrumental analysis techniques (Chromatography - Spectroscopy etc.)					
7	Theoretical & Practice	Gravimetric Analysis in Foods					
8	Intermediate Exam	Mid-Term Exam					
9	Practice	Gravimetric Food Analysis -Determination of Moisture and Dry Matter in Foods					
10	Practice	Gravimetric Food Analysis-Determination of oil and ash in Foods					
11	Practice	Volumetric Analysis in Foods-Determination of salt and acidity in Foods					
12	Practice	Volumetric Analysis in Foods-Determination of Sugar in Foods					
13	Practice	Volumetric Analysis in Foods-Protein in Foods determination					
14	Practice	Determination of Crude Cellulose in Foods					
15	Practice	General Repetition					
16	Final Exam	Final Exam					

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	4	56
Lecture - Practice	14	0	1	14
Assignment	12	0	1	12
Individual Work	5	0	2	10
Midterm Examination	1	0	4	4



Final Examination	1		0	4	4
			To	tal Workload (Hours)	100
		[Total Workload (Hours) / 25*] = ECTS	4
*25 hour workload is accepted as 1 ECTS					
Learning Outcomes					

1	Students will improve their teamwork skills		
2	improve their time management skills		
3	gain practice in conducting and analyzing laboratory exp	periments and in dealing with related problems	
4	Learning analyzing laboratory experiments and in dealing	g with related problems	
5	Learning students will improve their teamwork skills		

Programme Outcomes (Food Technology)

1	To be able to remember technolgies used in food sector
2	to be able to recognise food production condition and provide to food safety
3	to be able to comprehend basic processes in food production
4	to be able to apply hygien and sanitation rules in food facilities
5	to be able to remember basic chemistry, food chemistry and microbiology
6	to be able to write physicial, chemical and nutritional properties of foods and to comment their effect on human health
7	to be able to memorise food quality control technics and to evaluate result of control according to food legislation
8	to be able to have knowledge of proffessional ethics and responsibility
9	to be able to work in team and individual
10	to be able to communicate orally and profiency in writing
11	to be able to follow professional development that adopt of life-long learning
12	to be able to be a person who wanted for sector

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3
P1	5	5	5
P2	5	5	5
P3	4	5	5
P4	5	4	4
P5	3	5	5
P6	5	3	5
P7	5	3	5
P8	3	3	5
P9	4	5	4
P10	3	4	4
P11	3	5	4
P12	4	5	5

