



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Laboratory Techniques							
Course Code		ZYD247		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	98 (Hours)	Theory	2	Practice	1	Laboratory	0
Objectives of the Course		With this course students; to provide a safe working environment in the laboratory in accordance with the legislation and analysis methods, and to gain proficiency to make pre-analysis and post-analysis operations and separation processes..							
Course Content		Safe working in the laboratory in accordance with the legislation and methods of analysis, pre- and post-analysis processes, proficiency to make separation processes.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Case Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	Laboratuvar Teknikleri Yrd.Doç.Dr Süreyya Saltan Evrensel Merc Publication
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Week	Weekly Detailed Course Contents	
1	Theoretical	Personal Safety Precautions Laboratory General Safety Precautions
	Practice	Personal Safety Precautions Laboratory General Safety Precautions
2	Theoretical	Laboratory General Safety Precautions
	Practice	Laboratory General Safety Precautions
3	Theoretical	Laboratory General Safety Precautions
	Practice	Laboratory General Safety Precautions
4	Theoretical	Safe working with chemical substances
	Practice	Safe working with chemical substances
5	Theoretical	Pre-Analysis Preparations
	Practice	Pre-Analysis Preparation
6	Theoretical	Pre-Analysis Preparations
	Practice	Pre-Analysis Preparations
7	Theoretical	Preparations before analysis and careful study during analysis
	Practice	Preparations before analysis and careful study during analysis
8	Intermediate Exam	Midterm
9	Theoretical	Post-Analysis Operations
	Practice	Post-Analysis Operations
10	Theoretical	Points to consider in post-analysis procedures
	Practice	Points to consider in post-analysis procedures
11	Theoretical	Filtration
	Practice	Filtration
12	Theoretical	Filtration



12	Practice	Filtration
13	Theoretical	Centrifugation, extraction
	Practice	Centrifugation, extraction
14	Theoretical	Filtration, Precipitation
	Practice	Filtration, Precipitation
15	Theoretical	Centrifugation, extraction
	Practice	Centrifugation, extraction
16	Final Exam	Final exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	28	0	2	56
Lecture - Practice	14	1	2	42
Total Workload (Hours)				98
[Total Workload (Hours) / 25*] = ECTS				4

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Providing Safe Working Environment in Laboratories
2	Perform pre / post analysis operations
3	do separation processes
4	Can work safely with chemicals
5	Can use centrifuge

**Programme Outcomes (Olive Cultivation and Olive Processing Technology)**

1	To be able to identify olive, soil and water and to having knowledge these
2	To be able to comprehend knowledge botany and fruit growing
3	To be able to comprehend table olive technology and to apply
4	To be able to comprehend knowledge basic biochemistry and olive oil chemistry and to have olive oil with modern and traditional systems, to have knowledge olive oil refinery, basic process and to have apply olive oil extraction
5	To be able to preserve olive and olive products in appropriate condition
6	To be able to comprehend growing olive plant with necessary agricultural methods and to have general maintenance of olive tree
7	To be able to evaluate olive by-products
8	To be able to comprehend knowledge about vegetable genetic
9	To be able to comprehend knowledge occupational safety and have apply first aid
10	To be able to apply necessary laboratory analysis in olive and olive products production
11	To be able to apply hygiene and sanitation rules in factory
12	To be able to comprehend knowledge of professional ethics and responsibility
13	To be able to comprehend knowledge marketing of olive products and to have olive management
14	To be able to communicate verbally and literally
15	To be able to comprehend planning olive growing and production area
16	To be able to comprehend knowledge vegetable ecology and protection of environment

**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	4	4	4	4	4
P2	4	4	4	4	4
P3	5	4	4	4	4
P4	4	4	4	4	4
P5	4	4	4	4	4

