



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Laboratory Technics							
Course Code		TAP103		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 (<i>Hours</i>)	Theory	1	Practice	0	Laboratory	3
Objectives of the Course		Having knowledge of workrules in thelaboratory, theuse of laboratorymaterials, quick analysis techniquesandlaboratory accreditation, tolearn sensory, physical, chemicalandmicrobiological analysis techniques							
Course Content		Definition andclassification of laboratory, qualification requirements forthelaboratory, intendeduse, therulesneed to be considered in laboratory studies, accidentsandoccupational safety in thelaboratory, materials, toolsandfunctions of these in laboratory, andworkingmethods, general methods of analysis, solutionsandpreparation of solutions, acid-baseconcepts, methods of plantanalysis, somebasicanalysis of foodstuffs, microbiologylaboratories, andthe general rules, andpreparation of growthmedium, heattreatment							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Course notes of Lecturers
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Week	Weekly Detailed Course Contents	
1	Theoretical	Laboratory work rules and points to be considered hazardous chemicals, and, first aid in laboratory accidents
2	Theoretical	The structural and physical properties of the laboratory, maintenance, cleaning, supplies, instruments and equipment of general laboratory
3	Theoretical	Preparation of solution (Molar, Normal, % concentration)
4	Theoretical	Chemical analysis techniques
5	Theoretical	Chemical analysis techniques
6	Theoretical	Spectrophotometric methods, ELISA and other serological methods, instrumental analytical techniques
7	Theoretical	Introduction to microbiology laboratory
8	Intermediate Exam	Midterm examination
9	Theoretical	Sensory analysis
10	Theoretical	Physical analysis techniques
11	Theoretical	Physical analysis techniques
12	Theoretical	Microbiological analysis techniques
13	Theoretical	Microbiological Analysis techniques
14	Theoretical	Rapid microbiological analysis techniques
15	Theoretical	Laboratory Accreditation

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Midterm Examination	1	21	1	22



Final Examination	1	21	1	22
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Recognizes and categorizes laboratories
2	Knows the rules to be considered in laboratory studies
3	Knowledgeable about laboratory security and accidents
4	Applies general analysis methods
5	Prepare the solution
6	Applies heat treatment

Programme Outcomes (Medical and Aromatic Plants)

1	Understands the importance of medicinal and aromatic plants in the World and Turkey
2	Learn about the general characteristics of medicinal and aromatic plants. Learn the important issues in cultivation and can apply.
3	Learn about usage technologies about medicinal and aromatic plants and can apply.
4	Inform of producers of medicinal and aromatic plant species in offering, material supply, production process, marketing matter.
5	Know and follow the laws and regulations pertaining to the profession.
6	Learns morphological and anatomical structures of plants.
7	Learns to identify medicinal and aromatic plants.
8	To be able to behave sensitively towards environmental issues at national and global levels and to be able to interpret solution-oriented information; to be able to be an environmentally conscious and entrepreneurial individual
9	To be able to follow, evaluate and implement new developments and applications in the cultivation of medicinal and aromatic plants independently or as a team.

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

	L1	L2	L3	L4
P6	4	4	4	4
P7	4	4	4	4
P8	4	4	4	4
P9	4	4	4	4

