



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Laboratory Techniques							
Course Code		TABİ205		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		Having knowledge of workrules in thelaboratory, theuse of laboratorymaterials, quick analysisistehniquesandlaboratoryaccreditation,tolearnsensory,physical, chemicalandmicrobiologicalanalysisistehniques							
Course Content		Definition andclassification of laboratory, qualificationrequirementsforthelaboratory, intendeduse, therulesneedto be considered in laboratorystudies,accidentsandoccupationalafety 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		Students have to complete their internship and properties within the required thirty work days time. The required rules are describes at the Adnan Menderes University, Sultanhisar Vocational School, Student Internship Instructions.							
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	Lecturer and Other Related Notes
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Week	Weekly Detailed Course Contents	
1	Theoretical	Laboratory work rules and point 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	Microbiologic analysis techniques
13	Theoretical	Microbiologic 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	Prapare growth medium
7	Applies heat treatment

### Programme Outcomes (Medical and Aromatic Plants)

1	Having the recognition, classification and the use araes knowledge of medical and aromatic plants
2	Having pratical and technical knowledge about cultivation and production of medical and aromatic plants
3	Having knoweledge of morphology, anotomy, cytology, physiology and biochemical structures of medical and aromatic plants
4	Having knowledge of important of soil conditions to grow medical and aromatic plants
5	Having information and the ability to use materials related with basic math and basic chemistry founded on qualifications gained in secondary education
6	Having ability to use effective own language and having knowledge of foreign language in order to communicate own colleagues and own customers
7	Having ability to collect medical and aromatic plants, having knowledge of seed technology, drying and conservation of these plants
8	Having ability to identify and to fight diseases and pests of medical and aromatic plants
9	Having knowledge of all Agricultural activities
10	Having knowledge of Atatürk Principle and Revolutions and to assimilate Atatürk Principle and Revolutions
11	Having consciousness of quality
12	Having knowledge and accumulation of investigative and evaluation
13	Ability to work as an individual capable of independent decision-making ideas verbally and in writing, stating the figure to communicate in a clear and concise
14	Ability to identify plants used for medical purposes and to obtain mixtures from drogs acquired these plants
15	Having skill and knowledge of marketing techniques medical and aromatic plants

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

	L1	L2	L3	L4	L5	L6	L7
P1					4		
P5	4	4	4	4		4	4
P12	4	4	4	4	4	4	4
P13	4	4	4	4	4	4	4

