



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Introduction to Laboratory							
Course Code		TBY103		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	103 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	2
Objectives of the Course		The Introduction to Laboratory aims to provide students with laboratory rules, information about the use of security and materials are provided.							
Course Content		Laboratory and Science, Fundamental specifications of science, The rules to be followed in the laboratory, Laboratory materials and equipments, The cleaning materials used in the laboratory, The technics of Sterilization, Laboratory safety and first aid, The units commonly used in the laboratory.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Individual Study, Problem Solving					
Name of Lecturer(s)		Lec. Zehra Burcu BAKIR							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Molecular Clonning Sambrook & Russel
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Week	Weekly Detailed Course Contents	
1	Theoretical	Laboratory and Science
	Preparation Work	Course materials
2	Theoretical	Fundamental specifications of science
	Preparation Work	Course materials
3	Theoretical	steps of the scientific method
	Preparation Work	Course materials
4	Theoretical	The rules to be followed in the laboratory
	Preparation Work	Course materials
5	Theoretical	Scientific procedures
	Preparation Work	Course materials
6	Theoretical	Laboratory materials
	Preparation Work	Course materials
7	Theoretical	Laboratory equipments
	Preparation Work	Course materials
8	Intermediate Exam	Midterm Exam
9	Theoretical	The cleaning materials used in the laboratory
	Preparation Work	Course materials
10	Theoretical	The technics of Sterilization
	Preparation Work	Course materials
11	Theoretical	Laboratory safety and first aid
	Preparation Work	Course materials
12	Preparation Work	Course materials
13	Theoretical	The units commonly used in the laboratory
	Preparation Work	Course materials
14	Theoretical	Practical lesson presentations
	Preparation Work	Course materials
15	Theoretical	Practical lesson presentations
	Preparation Work	Course materials



16	Final Exam	Final exam
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**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Laboratory	14	1	2	42
Midterm Examination	1	1	1	2
Final Examination	1	2	1	3
Total Workload (Hours)				103
[Total Workload (Hours) / 25*] = <b>ECTS</b>				4

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Can express basic safety rules of the laboratory.
2	Will be able to use basic laboratory equipment.
3	Will be able to use centrifuges, autoclave and balance.
4	Will be able to use sterilization techniques.
5	Will be able to use physical and chemical sterilization.

**Programme Outcomes (Agricultural Biotechnology)**

1	To be able to develop skills in identifying, modeling and solving problems in agricultural biotechnology
2	To be able to synthesize life and engineering sciences for the effective resource planning of agricultural biotechnology applications
3	To be able to interpret about living organisms structure, metabolic and physiological processes in order to propose biotechnological solutions to the agricultural problems
4	To be able to analyze genomic, metabolomic and proteomic information via bioinformatic tools.
5	To have the ability to analyze collected data and interpret the results.
6	To have the ability of individual working ability and to make independent decisions, to work in inter-disciplinary and interdisciplinary teamwork, to communicate by expressing their ideas orally and in writing, clearly and concisely
7	To have the awareness of professional liabilities and ethics
8	To be able to follow current national and international problems

**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	2	3	3	2
P2	4	4	4	4	4
P3	3	4	4	4	4
P4	4	4	4	4	4
P5	4	4	5	4	4
P6	5	5	5	5	5
P7	5	5	4	4	5
P8	2	3	3	3	3

