



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Microbiology							
Course Code		LBT107		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to teach students about microorganisms (prokaryotes, protozoa, fungi and viruses). To give basic information about the structures, biology, physiology, To teach metabolisms, classifications and usage areas in biotechnology.							
Course Content		Microorganisms, microbial life, cell structure of microorganisms, metabolism, microbial reproduction, metabolic regulation, evolution and systematic							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)		Ins. Hilal DEMİRPEŇE							

Prerequisites & Co-requisites

Equivalent Course	BYL107
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Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Madigan, M.T., Martinko, J. M., Parker, J. 2016. Brock's Biology of Microorganisms. 14th Edition, Prentice-Hall, Inc., USA
2	Lodish, H., Berk, A., Zipursky, S.L., Matsudaria, P., Baltimore, D., Darnell, J., 2000. Molecular cell Biology.
3	Freeman W.H., Tortora, C. F., Funke, B. R., Case, C.L. 1995. Microbiology: An Introduction, 5th Edition, The Benjamin/Cummings Publishing Company Inc.

Week	Weekly Detailed Course Contents	
1	Theoretical	Microorganisms and microbiology, An overview of microbial life
2	Theoretical	Macromolecules, Cell structure/Function
3	Theoretical	Nutrition and laboratory culture and metabolism of microorganisms
4	Theoretical	Microbial reproduction
5	Theoretical	Fundamentals of molecular biology
6	Theoretical	Metabolic regulation
7	Theoretical	Fundamentals of virology
8	Theoretical	Fundamentals of virology (Midterm Exam)
9	Theoretical	Bacterial genetics
10	Theoretical	Microbial evolution and systematic
11	Theoretical	Prokaryotic diversity: Bacteria
12	Theoretical	Prokaryotic diversity: Archaea
13	Theoretical	Eukaryotic cell biology and eukaryotic microorganisms
14	Theoretical	Microbial genomics, Viral diversity

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Reading	10	0	2	20
Individual Work	14	0	1	14
Final Examination	1	4	1	5



Board Examination	1	7	1	8
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To have knowledge about basic microbiology topics
2	To learn the classification of prokaryotic and eukaryotic microorganisms.
3	To have knowledge about metabolism in microorganisms.
4	To have knowledge about nutrition, growth and reproduction of microorganisms.
5	To be able to have information about evolution in micro-organisms
6	To understand the differences between prokaryotic and eukaryotic microorganisms.
7	To have basic knowledge about microbial genomics
8	Ability to comment on interactions between microorganisms
9	To be able to learn the use of microorganisms in some applications in biotechnology.

Programme Outcomes (Organic Agriculture)

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11	

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	L8	L9
P5	5	5	5	5	5	5	5	5	5
P6	3	3	3	3	3	3	3	3	3

