

# LABORATORY OF FOOD MICROBIOLOGY-1

1	Course Title:	LABORATORY OF FOOD MICROBIOLOGY-1	
2	Course Code:	GMD2210	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	4	
7	ECTS Credits Allocated:	2.00	
8	Theoretical (hour/week):	0.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	2	
11	Prerequisites:	-	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. FİKRİ BAŞOĞLU	
15	Course Lecturers:	Prof.Dr. Fikri BAŞOĞLU	
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Ziraat Fakültesi Gıda Mühendisliği Bölümü 16059 Görükle/Bursa Tel: 0224 2941492 Fax: 0224 2941402 e-posta:fbasoglu@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	To give information about fundamental laboratory knowledge and help students to gain required skills on food microbiology, to introduce diagnostic methods used in food microbiology.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To have information about the rules must be followed in food microbiology laboratory, tools and sterilisation techniques used in food microbiology lab.
		2	To have information about sampling techniques
		3	To have information about detection of food contaminating microorganisms from different sources
		4	To have information about cultural and microscobic enumeration techniques
		5	To have information about isolation and identification techniques
		6	To have information about detection methods used for indicator and pathogen microorganisms in foods
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21	Course Content:		
		<b>Course Content:</b>	
Week	Theoretical	Practice	

1		Introduction, explanation of laboratory rules followed in food microbiology laboratories.
2		Introduction of culture media and equipment used in food microbiology, explanation of sterilization methods
3		Explanation of sampling methods used for microbiological analysis
4		Sources of food spoiling microorganisms (analysis of hands, tap water, air, etc.)
5		Methods used for detection of microbial loads of food stuffs (I)
6		Methods used for detection of microbial loads of food stuffs (II)
7		Isolation and identification of food-born microorganisms
8		Mid-term examination, repetition
9		Diagnostic methods used for indicator and pathogen microorganisms (I)
10		Diagnostic methods used for indicator and pathogen microorganisms (II)
11		Microscopic counting methods (I)
12		Microscopic counting methods (II)
13		Microscopic counting methods (III)
14		Applications on determination of microbial loads of different food stuffs
22	Textbooks, References and/or Other Materials:	Gıda Mikrobiyolojisi ve Uygulamaları (Kadir Halkman) Mikrobiyolojide Sayım Yöntemleri (Velittin Gürgün, A. Kadir Halkman)
23	Assesment	
<b>TERM LEARNING ACTIVITIES</b>		<b>NUMBER</b>
		<b>WEIGHT</b>
Midterm Exam		1
Quiz		0
Home work-project		0
Final Exam		1
Total		2
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		
24	<b>ECTS / WORK LOAD TABLE</b>	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	0	0.00	0.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	1.00	14.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	15.00	15.00
Total Work Load			77.00
Total work load/ 30 hr			2.23
ECTS Credit of the Course			2.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	4	3	5	5	3	3	4	5	4	4	0	0	0	0	0
ÖK2	4	4	3	5	5	3	3	4	5	4	4	0	0	0	0	0
ÖK3	4	4	3	5	5	3	3	4	5	4	4	0	0	0	0	0
ÖK4	4	4	3	5	5	3	3	4	5	4	4	0	0	0	0	0
ÖK5	4	4	3	5	5	3	3	4	5	4	4	0	0	0	0	0
ÖK6	4	4	3	5	5	3	3	4	5	4	4	0	0	0	0	0
LO: Learning Objectives    PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							