BASIC FOOD MICROBIOLOGY

1	Course Title:	BASIC FOOD MICROBIOLOGY
2	Course Code:	VBH5001
3	Type of Course:	Compulsory
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	1.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. AYŞEGÜL EYİGÖR
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	e-posta: aeyigor@uludag.edu.tr telefon: 02242941334 adres: Uludağ Üniversitesi Veteriner Fakültesi Besin Hijyeni ve Teknolojisi Anabilim Dalı 16059 Görükle Kampusu Bursa
17	Website:	http://saglikbilimleri.uludag.edu.tr
18	Objective of the Course:	To teach students fundamentals of food microbiology
19	Contribution of the Course to Professional Development:	Learns the impact of basic food microbiology to public and animal health.
20	Learning Outcomes:	
	1	Learns main Microbes in Foods and their Sources
	2	Learns normal Microbiological Quality of Foods and its Significance
	3	Learns Factors Influencing Microbial Growth in Food
	4	Learns important Factors in Microbial Food Spoilage
	5	Learns microbial Foodborne Diseases
	6	Learns about basic food microbiology rules, equipment, materials and media
	7	Learns basic food microbiology laboratory applications
	8	Learns main control applications for preventing microorganisms in foods
	9	
	10	

21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Introduction to main microbes in foods	Introduction to food microbiology laboratory
2	Sources of Microorganisms in Foods	Main equipment and materials used in laboratory I
3	Normal Microbiological Quality of Foods and its Significance	Main equipment and materials used in laboratory II

4	Microbial Growth Response in the Food Environment	Solid media preparation
5	Factors Influencing Microbial Growth in Food	Liquid media preparation
6	Beneficial Uses of Microorganisms in Food	Basic biochemical tests
7	Microorganisms Used in Food Fermentation	Sampling from foods I
8	Microbial Food Spoilage	Sampling from foods II
9	Important Factors in Microbial Food Spoilage	Dilution media preparation
10	Spoilage of Specific Food Groups	Homogenization of solid food, dilution and plating for TAMB and coliforms
11	Microbial Foodborne Diseases	Interpretation of results
12	Foodborne Intoxications	Liquid food: dilution and plating for TAMB and coliforms
13	Foodborne Infections	Interpretation of results
14	Control of Microorganisms in Foods	Overview of legal requirements for bacterial counts

22	Textbooks, References and/or Other Materials:	1.Gıda mikrobiyolojisi uygulamaları, Prof Dr. Kadir Halkman, 2005 2. Gıda Hijyeni ve Mikrobiyolojisi, İrfan Erol, 2007 3. Gıdaların mikrobiyolojik analizi, Adnan Ünlütürk, Fulya Turantaş, 2002 4. Modern Food Microbiology (Jay, James M., Loessner, Martin J., Golden, David A. 7th ed. 2005)
23	Assesment	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	1.00	14.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	5.00	70.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	2.00	2.00
Total Work Load			114.00
Total work load / 30			3.80
ECTS Credit of the Course			4.00

Contribution of Term (Year) Learning Activities to	0.00
Contribution of Final Exam to Success Grade	100.00
Measurement and Evaluation Techniques Used in the	Answering problem-based questions by solution-based

24	**ECTS / WORK LOAD TABLE**

Quiz	0
Final Exam	1

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	5	1	1	4	1	1	2	1	5	2	0	0	0	0	0	0
ÖK2	5	1	1	4	1	1	2	1	5	2	0	0	0	0	0	0
ÖK3	5	1	1	4	1	1	2	1	4	3	0	0	0	0	0	0
ÖK4	5	1	1	4	1	1	2	1	4	3	0	0	0	0	0	0

ÖK5	5	4	1	4	1	1	2	1	5	2	0	0	0	0	0	0
ÖK6	3	1	3	3	1	1	2	1	5	2	0	0	0	0	0	0
ÖK7	3	1	3	3	1	1	2	1	5	2	0	0	0	0	0	0
ÖK8	5	1	5	4	1	1	2	5	4	3	0	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**