



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Food Microbiology Analysis							
Course Code		GKA102		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	78 (Hours)	Theory	2	Practice	1	Laboratory	0
Objectives of the Course		With this course students ; legislation and methods of analysis of the counting of suitable as indicator microorganisms, pathogenic microorganisms analysis, milk and dairy products and juices , meat, fruit and vegetables, microbiological analysis of honey with grain and products are aimed to gain the competencies to do the microbiological analysis.							
Course Content		Sampling, media preparation , Colonial Census, Preparation for Microbiological Analysis , Culture Acquisition , Microscopic Examination , meat, fruit and vegetables, cereals and their products , milk and milk products , to microbiological analysis of honey with water / evaluation , Analysis of Microbiology Laboratory Post-Processing							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Individual Study					
Name of Lecturer(s)		Lec. Hafize Ayla SARI							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	"Gıda Mikrobiyolojisi" Ed. Prof. Dr. Osman Erkmen, Eflatun Yayınevi, 2010. [2] "Gıda Mikrobiyolojisi" Prof. Dr. Adnan ÜNLÜTÜRK, Prof. Dr. Fulya TURANTAŞ
2	"Gıda Mikrobiyolojisi" Prof. Dr. Adnan ÜNLÜTÜRK, Prof. Dr. Fulya TURANTAŞ
3	Arda, M. 2000. Temel Mikrobiyoloji. Medisan Yayın Serisi: 46. Ankara, 548 sayfa

Week	Weekly Detailed Course Contents	
1	Theoretical	Preparation and examination , examination under a microscope using a simple painting technique , microscopic examination using Gram Staining technique
	Practice	Preparation and examination , examination under a microscope using a simple painting technique , microscopic examination using Gram Staining technique
2	Theoretical	Preparation of the medium , and cultivation done microorganism count ( homogenization and dilution )
	Practice	Preparation of the medium , and cultivation done microorganism count ( homogenization and dilution )
3	Theoretical	Preparation of the medium , and cultivation done microorganism count ( homogenization and dilution )
	Practice	Preparation of the medium , and cultivation done microorganism count ( homogenization and dilution )
4	Theoretical	The isolation and identification of microorganisms
	Practice	the isolation and identification of microorganisms
5	Theoretical	The isolation and identification of microorganisms
	Practice	The isolation and identification of microorganisms
6	Theoretical	Indicator Microorganisms in Water Analysis, Pathogenic Microorganisms in Water Analysis
	Practice	Indicator Microorganisms in Water Analysis, Pathogenic Microorganisms in Water Analysis
7	Theoretical	Microbiological Analysis of Raw Milk
	Practice	Microbiological Analysis of Raw Milk
8	Theoretical & Practice	Midterm Exam
9	Theoretical	Microbiological Analysis in Milk and Dairy Products
	Practice	Microbiological Analysis in Milk and Dairy Products
10	Theoretical	Microbiological analysis of meat and meat products
	Practice	Microbiological analysis of meat and meat products
11	Theoretical	Microbiological analyzes of fruits and vegetables



11	Practice	Microbiological analyzes of fruits and vegetables
12	Theoretical	microbiological analysis in grains and products
	Practice	microbiological analysis in grains and products
13	Theoretical	Microbiological analyzes of honey
	Practice	Microbiological analyzes of honey
14	Theoretical	Microbiological analyzes of canned
	Practice	Microbiological analyzes of canned
15	Theoretical	food poisoning
	Practice	food poisoning
16	Final Exam	final exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Laboratory	14	2	1	42
Reading	4	0	1	4
Individual Work	2	0	1	2
Midterm Examination	1	0	1	1
Final Examination	1	0	1	1
Total Workload (Hours)				78
[Total Workload (Hours) / 25*] = <b>ECTS</b>				3

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	make a count of indicator organisms
2	Microbiological analysis of meat and meat products do / evaluate
3	Microbiological analysis of meat and meat products do / evaluate
4	Cereal products and microbiological analyzes do / evaluate
5	Honey make microbiological analysis / evaluating
6	Milk and make their products and evaluate microbiological analysis

**Programme Outcomes (Food Quality Control and Analysis)**

1	Having basic knowledge about food products
2	Having knowledge for Production and hygiene in food products, preservation, microbiology, quality control and analysis
3	Having skills and discipline for working in the laboratory and using laboratory materials,
4	Developing positive attitudes about learning and knowledge and lifelong learning in the field.
5	Using the information and communication technologies at the level required by the work areas
6	Act in accordance with scientific, cultural and ethical values
7	Having sufficient consciousness about environmental protection, occupational health and safety issues.

**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
P1	3	3		2		
P2	4	4	3	3	3	3
P3	4	5	5	5	5	5
P5	3					

