



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		General Microbiology							
Course Code		GT129		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		With this course students; It is aimed to acquire the competencies of microbiological sampling, preparation for microbiological analysis, culture acquisition and microscopic examination in accordance with classification of microorganisms, preparation preparation, legislation and analysis methods.							
Course Content		Definition of microbiology, classification of microorganisms, reproduction, metabolism, sterilization and disinfection							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Problem Solving					
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	Genel Mikrobiyoloji Uygulama Teknikleri A.Temiz, Uğurer Yayıncılık
2	Gıda Mikrobiyolojisi O.ERKMEN, Eflatun Yayınevi
3	Gıda Mikrobiyolojisi C.HACER, M.TAYER, Dora Basım Yayın
4	Acar,J. 1997 Genel Mikrobiyoloji Ders Notları Anonymous. 2005. Gıda Mikrobiyolojisi Uygulamaları . Ed: A.Kadir HALKMAN, Başak Matbaacılık Ltd. Şti., Ankara, 358 sayfa. Arda, M. 2000. Temel Mikrobiyoloji. Medisan Yayın Serisi: 46. Ankara, 548 sayfa.
5	Gürgün, V.,Halkman, A.K. 1988. Mikrobiyolojide Sayım yöntemleri. Gıda Teknolojisi Derneği Yayın No: 7. San Matbaası, Ankara, 146 sayfa.
6	Özçelik, S. 1998. Genel Mikrobiyoloji (İkinci Basım) Süleyman Demirel Üniversitesi Yayın No: 1. Atabey / Isparta, 259 sayfa.
7	Temiz, A. 1994. Genel Mikrobiyoloji Uygulama Teknikleri. Topal, Şeminur. 1996.
8	Gıda Güvenliği Ve Kalite Yönetim sistemleri. TÜBİTAK-MAM Matbaası, Gebze/Kocaeli, 225 sayfa.
9	Temiz,A. 1994. Genel Mikrobiyoloji Uygulama Teknikleri. Şafak Matbaacılık Ltd.Şti. Ankara, 266 Sayfa.

Week	Weekly Detailed Course Contents	
1	Theoretical	History of microbiology
2	Theoretical	Classification of microorganisms
3	Theoretical	Bacteria, shape and arrangement of bacteria, involution in bacteria, cell structure in bacteria
4	Theoretical	Riketsiyalar, Blue-green algae, fungi, protozoons
5	Theoretical	Algae, viruses, nutrition in microorganisms, nutrients
6	Theoretical	Environment factors affecting the urea, Reproduction curves of microorganisms, control of microorganisms
7	Theoretical	Aseptic Working Technique and Sampling Hygiene Control Samples
8	Intermediate Exam	Midterm Exam
9	Theoretical	Preparations for Sterilization, Sterilization, Preparing the Seed Preparation, Incubation, Preparation of Dilution Liquid and Series
10	Theoretical	Colony Morphology Pure Culture
11	Theoretical	Preparations, Maya and general characteristics / Bacterial Endospores and Sports Painting
12	Theoretical	Microscope Examination
13	Theoretical	Examination of Microorganism Cells, Relationships between Microorganisms / Preparing of food, sowing and microorganism counting
14	Theoretical	Microbiological methods / Isolation and identification of microorganisms
15	Theoretical	Counting in Lams



16	Final Exam	SEMESTER FINAL EXAM
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**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	1	42
Assignment	8	0	3	24
Midterm Examination	1	3	1	4
Final Examination	1	4	1	5
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Microbiological sampling
2	Preparing for microbiological analysis
3	Obtaining Microbiological Culture
4	Purification of microbiological culture
5	Making Microscopic Investigation

**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
P2	3				
P3	5	5	5	5	5
P4	3	3	3		
P6					2

