AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Food Microbiology						
Course Code	BİO607		Couse Level	Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	179 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of the course is to get the students acquainted about microorganisms which cause spoilage in foods and health risk in humans, principles and methods of food preservation, microbiological analysis methods of foods, and the use of safe food criterions.						
Course Content	Microorganisms and food, pathogenic micro-organisms in foods, food safety and microbiological criteria						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Discussion, Individual Study						
Name of Lecturer(s)	Prof. Hacı Halil BIYIK						

Assessment Methods and Criteria

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

Recommended or Required Reading

1	1. Food Microbiology, A. Ünlütürk, , F. Turantaş, Mengi Tan Basımevi, 1999

Week	Weekly Detailed Course Contents	
1	Theoretical	Microorganism-food relationships
2	Theoretical	Microorganisms in food
3	Theoretical	Factors effecting the growth of microorganisms in food
4	Theoretical	Fermentation microbiology and fermented foods
5	Theoretical	Microoorganisms that play a role in fermentation
6	Theoretical	Fungi that play a role in fermentation
7	Intermediate Exam	Midterm
8	Theoretical	Control of micrroganisms in foods
9	Theoretical	Control of micrroganisms in foods
10	Theoretical	Control of micrroganisms in foods
11	Theoretical	İnhibition of microbial growth
12	Theoretical	Microbiological spoilage in canned foods
13	Theoretical	İnhibition of microbial growth
14	Theoretical	Killing of microorganisms
15	Theoretical	Killing of microorganisms
16	Theoretical	Probiotics
17	Final Exam	Term Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	3	39
Assignment	3	0	15	45
Term Project	3	0	6	18
Laboratory	5	0	4	20
Reading	12	0	3	36
Quiz	5	0	3	15
Midterm Examination	1	0	3	3

Final Examination	1	0	3	3
		Total Workload (Hours)		179
		[Total Workload (Hours) / 25*] = **ECTS**		7

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	learning of the resources transmission of microorganisms in foods
2	Learning internal and external factors affecting the development of microorganisms in foods
3	Learning of diseases transmissible to humans with food
4	To learn the ways of prevention of microbial contamination in foods
5	Learning was to perform microbiological analysis of foods
6	Learning prepares food analysis report

Programme Outcomes *(Biology Doctorate)*

1	To have enough scientific background knowledge towards a specific study and research area
2	To have an ability to identify, evaluate and develop a solution for a problem on biological aspects
3	To be able to evaluate scientific observations and results of experiments using statistical analysis methods
4	To have basic skills in areas related to field of biological studies
5	To have the ability to develop cooperation with different disciplines with the high level of social communication required for studies
6	To have knowledge of technology and use of methods and means used in biological researches
7	To have an ethical understanding which will be a guide for their investigations and publications
8	For PhD; to have European Language Portfolio C1 general level language skill
9	To be able to present and discuss own research results in accordance with scientific discipline using technological tools in scientific research environments
10	To be able to detect and evaluate economic and social impacts of an own original research results
11	To be equipped with ability of carrying out independent study in biological field
12	To be able to publish at least one an international/national peer reviewed scientific paper and/or produce or interpret an original work related to biology in order to expand the frontiers of knowledge
13	To be able to develop new approaches or adaptations to be used in solving scientific and biological problems
14	To be able to develop new understanding and approaches in order to explain a new phenomenon or a biological event under investigation
15	To have abilities and experience to create new search area through inspiration gained from subject searched

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
P2	2		2			
P3		2				
P5						3
P6				4		
P7					3	