



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Starter Cultures in Food Industry							
Course Code		VBH552		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	1	Practice	0	Laboratory	0
Objectives of the Course		Definition of starter cultures and areas of application, the mechanism of action							
Course Content		The effects of microorganisms attributed as starter cultures, general properties and characteristics of starter cultures used in meat and dairy industry							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)		Lec. Sadık BÜYÜKYÖRÜK							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Kılıç S., Süt Mikrobiyolojisi, 2010.
2	Üçüncü M., Süt ve mamülleri teknolojisi, 2010
3	Anar Ş., Et ve et ürünleri teknolojisi, 2010.

Week	Weekly Detailed Course Contents	
1	Theoretical	Starter cultures and their characteristics
2	Theoretical	Probiotics and lantibiotics
3	Theoretical	Starter cultures used in meat technology 1: Staphylococcus spp
4	Theoretical	Starter cultures used in meat technology 2: Lactobacilli
5	Theoretical	Starter cultures used in meat technology 3: Micrococcus spp
6	Theoretical	Starter cultures used in meat technology 4: Kocuria spp
7	Theoretical	Starter cultures used in meat technology 5: Pediococcus spp
8	Intermediate Exam	Midterm exam
9	Theoretical	Starter cultures used in milk technology 1: Lactococci
10	Theoretical	Starter cultures used in milk technology 2: Lactobacilli
11	Theoretical	Starter cultures used in milk technology 3: Streptococci
12	Theoretical	Starter cultures used in milk technology 4: Leuconostoc spp
13	Theoretical	Starter cultures used in milk technology 5: Bifidobacterium
14	Theoretical	Yeast and mould used as a Starter cultures
15	Theoretical	Discussion
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Seminar	2	0	2	4
Reading	14	0	2	28
Midterm Examination	1	10	2	12
Final Examination	1	14	3	17
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	To determine the features of strains which must carry to be called a starter culture
2	Determination of mechanisms of starter cultures
3	Specifying starter cultures used in meat industry
4	Specifying starter cultures used in dairy industry
5	The terms of probiotics
6	Lantibiotics and their working principles against to pathogenic microorganisms

Programme Outcomes (*Food Hygiene and Technology (Veterinary Medicine) Master*)

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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	5		4	3		
P2	4		3	2	5	1
P3	1	4				5
P4	3	4	5			2
P5	3	4	5			2
P6	3	4	5			2
P7	3	4	5			2
P8	3	4	5			2
P9	2			5	4	3
P10	2			5	4	3
P11	2			5	4	3
P12	2			5	4	3
P13	2			5	4	3

