



**AYDIN ADNAN MENDERES UNIVERSITY  
GRADUATE SCHOOL OF HEALTH SCIENCES  
VETERINARY FOOD HYGIENE AND TECHNOLOGY  
FOOD HYGIENE AND TECHNOLOGY (VETERINARY)  
FOOD HYGIENE AND TECHNOLOGY (VETERINARY) MASTER  
COURSE INFORMATION FORM**

Course Title	Additives in Food Processing								
Course Code	VBH549		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	4	Workload	100 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Indicate of the additives used in foods, Learning the objectives of their using in foods.								
Course Content	Description of the food additives, purposing, variety and limitations of using of those								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion								
Name of Lecturer(s)	Prof. Ergün Ömer GÖKSOY								

#### Assessment Methods and Criteria

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

#### Recommended or Required Reading

1	Altuğ., Gıda katkı maddeleri, 2009.
2	Doğruyol., Gıda katkı maddeleri ve zararları, 2007
3	Şimşek H., Gıda katkı maddeleri rehberi, 2010.

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of food additives, and reasons of use
2	Theoretical	Food additives and toxicological tests, NOAEL (No Observed Adverse Effect Level), ADI (Acceptable Daily Intake)
3	Theoretical	Distortions occurring in foods and the effects of the food additives
4	Theoretical	Bacteriocins and using in foods
5	Theoretical	Bacteriophage and using in foods
6	Theoretical	E number system and classification of food additives according to basic functions
7	Theoretical	Acidity regulator food additives (Glucono delta-lactone, lactic acid, formic acid, tartaric acid, fosforic acid)
8	Intermediate Exam	Midterm exam
9	Theoretical	Antioxidants and antioxidant synergists (Ascorbic acid, tocoferols)
10	Theoretical	Antimicrobial substances-protectors (Benzoic acid, nitrate-nitrite)
11	Theoretical	Emulsifiers, stabilizers, emulsifiers salts
12	Theoretical	Flavour (taste and odor), enhancers
13	Theoretical	Legal regulations about food additives
14	Theoretical	Chemicals that can be contaminated to foods (Heavy metals, polychlorinated biphenyls, dioxins, pesticides)
15	Theoretical	Possible finding chemical Acrylamide and polymers in foods
16	Final Exam	Final exam

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Reading	14	0	2	28
Midterm Examination	1	16	1	17



Final Examination	1	26	1	27
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = ECTS	4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To specify for which purpose the food additives are used
2	To inspect the effect of food additives on human health
3	To indicate whether or not an indispensable or limitations for using of food additives
4	To specify the effect of accepted as a food additive substances in the food processing
5	To indicate the effect modes of food additives
6	To specify E codes of food additives

### Programme Outcomes (Food Hygiene and Technology (Veterinary) 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	3	4		2	5
P2		3	4	5	2	
P3	4				5	4
P4	4	2	3	1	5	4
P5	4	2	3	1	5	4
P6	4	2	3	1	5	4
P7	4	2	3	1	5	4
P8	4	2	1	3	5	4
P9	4	2	1	3	5	4
P10	4	2	1	3	5	4
P11		4				
P12		4	3			
P13		5	4			

