FOOD CONTAMINANTS											
1	Course Title:	FOOD C	OOD CONTAMINANTS								
2	Course Code:	VBH5026									
3	Type of Course:	Optional									
4	Level of Course:	Second Cycle									
5	Year of Study:	1									
6	Semester:	2									
7	ECTS Credits Allocated:	4.00									
8	Theoretical (hour/week):	2.00									
9	Practice (hour/week):	0.00									
10	Laboratory (hour/week):	0									
11	Prerequisites:	None									
12	Language:	Turkish									
13	Mode of Delivery:	Face to face									
14	Course Coordinator:	Prof. Dr. FİGEN ÇETİNKAYA									
15	Course Lecturers:										
16	Contact information of the Course Coordinator:	e-mail: fcetinkaya@uludag.edu.tr Uludağ Ünv. Veteriner Fak. Besin Hijyeni ve Teknolojisi Anabilim Dalı									
17	Website:										
18	Objective of the Course:	To teach health hazards of veterinary drug residues (antibiotics and anabolic hormones) in foods and the contamination with pesticides, heavy metals, polycyclic aromatic hydrocarbons (PAHs), dioxins and polychlorinated biphenyls (PCB's) of foods									
19	Contribution of the Course to Professional Development:										
20	Learning Outcomes:										
		1	The use of antibiotics in veterinary medicine								
		2	Significance for human health and food technology of antibiotic residues in foods of animal origins								
		3	Classification of anabolic hormones and their use in veterinary medicine								
		4	Health risks of hormone residues in foods								
		5	Classification and usage causes of pesticides, and health hazards of their residues in foods								
		6	The presence of heavy metal residues in foods and their health effects								
		7	The presence of polycyclic aromatic hydrocarbons (PAHs) in foods and their health effects								
		8	The presence of dioxins and polychlorinated biphenyls (PCB's) in foods and their health effects								
		9									
		10									
21	Course Content:										
	Course Content:										

Week	Theoretical		Practice					
1	Definition and classification of residue contaminants in foods	es and						
2	The use of antibiotics in veterinary me	edicine						
3	The presence of antibiotic residues in of animal origin and the factors affecti residual levels							
4	Risks for human health and food tech of antibiotic residues	nnology						
5	Growth of antibiotic-resistant microorg	ganisms						
6	Classification and usage causes in ve medicine of anabolic hormones	eterinary						
7	The presence of anabolic hormone re in foods and the factors affecting their							
8	Risk to human health from anabolic h residues	ormone						
9	Using prohibited substances for anab effects and related legal regulations	olic						
10	Classification of pesticides and their r in foods							
11	Adverse effects of pesticide residues human health	on						
12	Mainly heavy metals harmful to health	1						
13	The presence of polycyclic aromatic hydrocarbons (PAHs) in foods, and health significance	uman						
14	The presence of dioxins and polychlo biphenyls (PCB's) in foods and their p carcinogenic effects							
22	Textbooks, References and/or Other Materials:		1. Erol, İ., 2007. Gıda Hijyeni ve Mikrobiyolojisi. ISBN: 978 -975-00131-0-9, Pozitif Matbaacılık Ltd. Şti., Ankara.					
			2. Çetinkaya, F., Elal Muş, T., 2010. Hayvansal Gıdalarda Hormon Kalıntıları, Tüketici Sağlığına Yönelik Riskler ve İlgili Yasal Düzenlemeler. U. Ü. Veteriner Fakültesi Dergisi, 29, 77-82.					
			3. Tayar, M., 2010. Gıda Güvenliği. ISBN: 978-605-89021-4-5, Ekosan Matbaacılık San. Tic. Ltd. Şti., İstanbul.					
			4. D'Mello, J.P.F., 2003. Food Safety. Contaminants and Toxins. ISBN: 0-85199-607-8, Cromwell Press, UK.					
23	Assesment	AU 1225 -	lweight					
		R	WEIGHT					
		0	0.00					
Quiz		0	0.00					
Home v	work-project	0	0.00					

Final Exam	1	100.00					
Total	1	100.00					
Contribution of Term (Year) Learning Activities Success Grade	es to	0.00					
Contribution of Final Exam to Success Grade	9	100.00					
Total		100.00					
Measurement and Evaluation Techniques Us Course	sed in the						
24 ECTS / WORK LOAD TABLE							

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	3.00	42.00
Homeworks	14	3.00	42.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	1.00	1.00
Total Work Load			113.00
Total work load/ 30 hr			3.77
ECTS Credit of the Course			4.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	5	1	2	3	2	2	3	3	4	5	0	0	0	0	0	0
ÖK2	4	2	2	3	3	2	2	3	5	4	0	0	0	0	0	0
ÖK3	5	1	2	2	3	3	2	4	4	5	0	0	0	0	0	0
ÖK4	5	1	2	3	2	2	3	3	4	5	0	0	0	0	0	0
ÖK5	5	1	2	2	3	3	2	4	4	5	0	0	0	0	0	0
ÖK6	3	2	3	3	4	2	3	5	3	4	0	0	0	0	0	0
ÖK7	4	2	2	4	5	2	2	3	4	4	0	0	0	0	0	0
ÖK8	3	3	2	3	4	2	1	4	3	3	0	0	0	0	0	0
			LO: L	earr	ning (Objec	tive	s F	Q: P	rogra	ım Qu	alifica	tions	<u> </u>		
Contrib 1 very low 2 low					3 Medium			4 High			5 Very High					

ution Level: