



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Advanced Food Toxicology							
Course Code		VBH642		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	1	Practice	0	Laboratory	0
Objectives of the Course		Structure, formation, sources of toxic compounds in foods; detection of adverse effects on health; mechanisms of action; The course aims to provide the students with information on methods and safety limits in which hazards can be controlled.							
Course Content		Classification of toxic food components, food additives, toxicology and health risks, reliability of food packaging materials, toxicological evaluation of genetic modification applications in foods and national and international regulations							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Concon, J. M. 1988. Food Toxicology.
2	Marcel Dekker, NY. Moffat, C.M. and K. Whittle. 1999. Environmental Food Contaminants in Food.
3	CRC Press, Boca Raton, FL. Shibamoto, T. and L.F. Bjeldanes. 1993. Introduction to Food Toxicology. Academic Press, Hartcourt Brace & Com. San Diego
4	Steinhart, C.E., Doyle, M.E. and B.A. Cochrane. 1995. International Food Safety Handbook
5	Marcel Dekker, NY. Vries, de J. 1997. Food Safety and Toxicity. CRC Press, Boca Raton

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and classification of toxic food ingredients
2	Theoretical	Foodborne microbial and parasitic diseases and intoxications
3	Theoretical	Foodborne microbial toxins and their identification
4	Theoretical	Toxic compounds found in foods and their identification
5	Theoretical	Pesticides and veterinary drugs
6	Theoretical	Negative effects of food additives on health
7	Theoretical	Toxicology of food additives
8	Theoretical	Midterm exam
9	Theoretical	Identification of heavy metals
10	Theoretical	Other environmental contaminants
11	Theoretical	Toxic compounds occurred during food processing
12	Theoretical	To learn the reliability of food packaging materials
13	Theoretical	Criteria, methods and tests used in toxicological evaluation of foods
14	Theoretical	Toxicological evaluation of genetic modification applications in newly developed foodstuffs
15	Theoretical	Discussion

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	1	42
Assignment	10	4	1	50
Midterm Examination	1	10	1	11



Final Examination	1	21	1	22
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To have knowledge about toxic foods and toxic compounds in foods
2	To learn foodborne microbial and parasitic toxic substances and to evaluate in terms of public health
3	Veterinary medicines, pesticides, the presence of environmental pollution in food and public health
4	To have knowledge about toxic substances transmitted during processing and packaging of foods and to learn and evaluate prevention measures
5	To be able to interpret toxic effects that may occur in newly developed foods and to apply prevention measures
6	To have knowledge about national and international measures in toxic assessments

Programme Outcomes (Food Hygiene and Technology (Veterinary Medicine) Doctorate)

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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	5	5	5	5	5
P2	5	5	5	4	4	5
P3	5	5	5	5	5	5
P4	5	5	5	5	5	5
P5	4	4	4	5	5	5
P7	5	5	5	5	5	5
P9	5	5	5	5	5	5
P10	4	4	4	4	4	4
P13	5	5	5	4	5	5

