AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Basic Principles in Toxicology							
Course Code		VFT502		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	6	Workload	150 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To give information about the development of toxicology, general concepts and principles, types of toxicity, toxicokinetics, clinical signs of intoxication, pathological findings, laboratory analysis and prevention of absorption of poisons in treatment, the use of antidotes, and supportive treatment for symptoms of accelerated and then disposing of the body.							
Course Content		Development of toxicology, general terms and principles, types of poisoning and the adverse effects of poisons, types of poisoning and the adverse effects of poisons, poisoning and toxicity assays, dose-effect relations, factors affecting the toxicity, toxicokinetic, mode of action of poisons, general causes of poisoning, diagnose and therapy are examined. Definition, classification, toxicokinetics, clinical symptoms, laboratory analysis and therapy of poison and poisoning are examined.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)		Prof. Ferda AKAR							

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Veteriner Hekimliğinde Toksikoloji, Prof. Dr. Sezai KAYA, Prof. Dr. İbrahim PİRİNÇCİ, Prof. Dr. Ayhan ÜNSAL, Prof. Dr. Ali BİLGİLİ, Prof. Dr. Ferda AKAR, Prof. Dr. Abdullah DOĞAN, Doç. Dr. Ender YARSAN; Medisan Yayınevi, 2002.
2	Tedavinin Farmakolojik Temeli, Öner SÜZER; Nobel Tıp Kitapevi, 2009.
3	İmmunoloji, K. Serdar DİKER; Medisan Yayınevi, 2005.
4	Principles and Methods of Toxicology, A. Wallace HAYES, Edward BROTHERS; Ann Arbor Press, 2001.
5	Handbook of Experimental Pharmacology; Comparative and Veterinary Pharmacology, Fiona CUNNINGHAM, Jonathan ELLIOTT, Peter LEES (Editors); Springer Press, 2009.
6	Plant Phenolics and Human Health: Biochemistry, Nutrition, Pharmacology, Cesar G FRAGA (Editor); A John Willey & Sons Inc. Publication, 2010.

Week	Weekly Detailed Course Contents	
1	Theoretical	The development of toxicology, general concepts and principles
2	Theoretical	The poison and poisoning the definition, classification
3	Theoretical	Types and forms of poisoning effect of poisons, poisoning and toxicity tests
4	Theoretical	Dose-effect relationship, intoxication, and factors affecting of the toxicity
5	Theoretical	Entry routes into the body of poisons, the absorption, distribution-accumulation
6	Theoretical	Biotransformation and disposal of poisons
7	Theoretical	Clinical signs of toxicity
8	Intermediate Exam	Midterm exam
9	Theoretical	General causes of poisonings
10	Theoretical	Diagnosis of poisoning
11	Theoretical	Poisoning treatment
12	Theoretical	Prevention of absorption, the use of antidotes, and supportive treatment for symptoms of accelerated and then disposing of the body
13	Theoretical	Prevention of absorption, the use of antidotes, and supportive treatment for symptoms of accelerated and then disposing of the body
14	Theoretical	The infected material and pathological findings
15	Theoretical	Laboratory analysis of poisoning
16	Final Exam	Final

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	2	84
Assignment	1	10	2	12
Quiz	4	3	2	20
Midterm Examination	1	14	2	16
Final Examination	1	16	2	18
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be informed about the definition and historical development of toxicology.
2	Poison, classifications and types of poisoning to be learned.
3	To learn about toxicokinetic.
4	To grasp the general principles of treatment of poisoning.
5	To give lectures and/or presentations and discuss with professionals in the area.

Programme Outcomes *(Veterinary Pharmacology and Toxicology Master's Without Thesis)*	
1	to be able to comprehend expert knowledge on field of pharmacology and toxicology in veterinary medicine
2	to be able to define expert knowledge on interdisciplinary interaction in pharmacology and toxicology
3	to be able to formulate ideas to solve complex problems using theoretical and practical information gained throughout the pharmacology and toxicology education
4	to be able to integrate and interpret information in the area of pharmacology and toxicology with information in different fields and, if the need arises, provides scientific information and solutions to solve problems.
5	to be able to develop and use strategies in his/her field of expertise in Master’s Program of Pharmacology and Toxicolog
6	to be able to comprehend methods of obtained and submitted scientific knowledge
7	to be able to analyse current information related to his/her field of expertise (scientific information, procedures etc.) and use them when necessary.
8	to be able to apply technological tools in social relationships of vocational and professional environment
9	to be able to review, evaluate and interpret any data (field observations, available scientific information etc.) towards a specific purpose.
10	to be able to comprehend expert knowledge on the function and basic pharmacological features of pharmacology and sub-branches of science, relationship between the drug and poison, pharmacokinetic, effects of the drugs, the dose-intensity and dose-effect relationship.
11	to be able to identify expert knowledge on the function and basic toxicological features of poison, classifications and types of poisoning, toxicokinetic, general principles of treatment of poisoning
12	to be able to define and use laboratory equipment in a pharmacology and toxicology laboratory.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	5	5	5	5	
P2	4		4		
P3				5	5
P4					4
P5	4	5	4	5	5
P6					5
P8	4	5	4	5	4
P9					5
P10			5		
P11	5	5			