AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Metals and Other Inorganic Poisons								
Course Code	VFT624		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	6	Workload	146 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The harmful effects of metals and metal compounds on animals, and to give information about non-metal poisoning occurring organic substance								
Course Content	Human and animals with acute, subacute and chronic toxicity and nutrient pollution of the environment and can lead to significant arsenic, cadmium, zinc, copper, mercury, lead, copper, selenium, molybdenum, nickel, antimony, cyanide, bismuth, barium, silver, tin, calcium, chromium, cobalt, sulfur, fluorine and magnesium with substances such as inorganic acid or caustic alkalis, nitrate, nitrite, inorganic compounds such as salt, the radioactive material (radium-226, uranium-238, iodine-131, strontium-89, and 90 , lead-210, cesium-137, etc.) and their effects, degrees of impact types and clinical use.							
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Klaassen, C. (2008) Casarett & Doull's Toxicology: The Basic Science of Poisons, 7th Edition, McGraw-Hill Companies, USA.
2	Hayes, WA (2007) Prenciples and Methods of Toxicology, 5th Edition, Taylor and Francis, London.
3	Hodgson, E (2010) A textbook of modern toxicology, 4 th Edition, John Wiley and Sons, Inc., Hoboken, Canada.

Week	Weekly Detailed Course Contents	
1	Theoretical	General information about Metals
2	Theoretical	Metals that make up the body's building blocks
3	Theoretical	Izelements
4	Theoretical	Creature of the elements of absorption, distribution
5	Theoretical	Participating in events in the body elements
6	Theoretical	Basic duties living thing formation of
7	Theoretical	Evaluation
8	Intermediate Exam	Midterm exam
9	Theoretical	Poisonings occurring with elementsPoisonings occurring with elements
10	Theoretical	Poisoning symptoms
11	Theoretical	Treatment of poisonings
12	Theoretical	Poisoning by organic substances
13	Theoretical	Toxicity and treatment of organic substances
14	Theoretical	Evaluation
15	Theoretical	Discussion
16	Final Exam	Final

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Assignment	6	2	2	24
Individual Work	14	1	2	42
Midterm Examination	1	8	2	10

Final Examination	1	12	2	14
			Total Workload (Hours)	146
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Will have general information about metals
2	Will have information of organic poisons.
3	To learn detection and treatment of poisoning caused by organic substances
4	To learn knowledge and propose suggestions on the area.
5	To find out and use resources about the profession in the area.

Programme Outcomes *(Pharmacology and Toxicology (Veterinary Medicine) Doctorate)*	
1	Gains expert knowledge on field of pharmacology and toxicology in veterinary medicine and, gains expert knowledge on interdisciplinary interaction in pharmacology and toxicology
2	To be equipped with the knowledge to develop original ideas about necessary issues in the field by using of both graduate and expertise levels knowledge, to be able to develop original definitions, products and diagnostic procedures, etc. via deepening and questioning these knowledge.
3	Develops and uses strategies in his/her field of expertise in PhD Program of Pharmacology and Toxicology
4	Reviews, evaluates and interprets any data (field observations, available scientific information etc.) towards a specific purpose.
5	Gains 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.
6	Gains expert knowledge on the function and basic toxicological features of poison, classifications and types of poisoning, toxicokinetic, general principles of treatment of poisoning.
7	Can offer training to technical staff who will work in pharmacology and toxicology laboratory
8	Reach to competence to prepare courses at the undergraduate level
9	Determines and uses laboratory equipment and consumables in a pharmacology and toxicology laboratory.
10	To be able to plan an interdisciplinary project and build team for the known or new defined problems and to manage and complete such a project when necessary.
11	To share his/her knowledge in the field with others by attending at field-related or other congresses, panels, symposiums, workshops, seminars, article discussions and problem solving sessions, etc., and to contribute to the solution in the team by establishing relations with the experts in different fields.
12	To contribute the scientific knowledge in the field via publications in national and international peer-reviewed scientific journals.
13	Takes roles in vocational organizations and institution.
14	Forms ideas to solve complex problems using theoretical and practical information gained throughout the pharmacology and toxicology education.
15	To adopt lifelong learning as a principle and acknowledge that the information gained through research is the most valuable gain.
16	Knows and protects rights of ideas and industrial property (patent right)

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	4	5		
P2					4
P3				4	5
P4	4	5	4	5	
P6	5	5	4		
P8	4	5	5		
P11				4	
P12	5	4	5		4
P14	5	5	4	4	