



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Volatile Poisons and Analysis							
Course Code		VFT642		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	150 (<i>Hours</i>)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To be informed about volatile poisons, volatile poisons diagnosis and characteristics, methods of extraction and analysis applications in biological environments.							
Course Content		Volatile poisons, volatile poisons diagnosis and characteristics, extraction methods and analysis techniques are examined.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Principles of Biochemical Toxicology, 3rd Edition, John TIMBRELL; Taylor & Francis Group Press, London, 2000.
2	Plant Phenolics and Human Health: Biochemistry, Nutrition, Pharmacology, Cesar G FRAGA (Editor); A John Willey & Sons Inc. Publication, 2010.
3	Principles and Methods of Toxicology, A. Wallace HAYES, Edward BROTHERS; Ann Arbor Press, 2001.
4	Handbook of Experimental Pharmacology – 199; Comparative and Veterinary Pharmacology, Fiona CUNNINGHAM, Jonathan ELLIOTT, Peter LEES (Editors); Springer Press, 2009.
5	Modern Toxicology, Ernest HODGSON, Patricia E. LEVI; Elsevier, London.

Week	Weekly Detailed Course Contents	
1	Theoretical	Volatile material selection poisons
	Practice	The purchase of essential laboratory practices zehirlemlerinde material
2	Theoretical	Sampling and the importance of volatile poisons
	Practice	Uptake of volatile material intoxication laboratory practices
3	Theoretical	Send samples of volatile poisons
	Practice	Volatile sample review of toxicity
4	Theoretical	Volatile reporting of poisonings
	Practice	Volatile toxicity study report
5	Theoretical	Toxins and methods of separation of volatiles
	Practice	Volatile sample analysis preparation stages of intoxication
6	Theoretical	Methods of analysis of volatile poisons
	Practice	Volatile analysis of toxicity
7	Theoretical	Article discussion
	Practice	Paper presentation
8	Intermediate Exam	Midterm exam
9	Theoretical	Volatile poisons and essential features
	Practice	Determination of alcohol
10	Theoretical	Volatile poisons and essential features



10	Practice	Determination of phenol
11	Theoretical	Volatile poisons and essential features
	Practice	Determination of phosphorus and phosphine
12	Theoretical	Volatile poisons and essential features
	Practice	Determination of halogenated hydrocarbons
13	Theoretical	Volatile poisons and essential features
	Practice	Determination of iodic acid
14	Theoretical	Volatile poisons and essential features
	Practice	Determination of cyanide
15	Theoretical	Article discussion
	Practice	Paper presentation
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	1	56
Lecture - Practice	15	2	2	60
Assignment	1	5	1	6
Midterm Examination	1	12	1	13
Final Examination	1	14	1	15
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To obtain information about the properties of volatile poisons.
2	Learn about the methods of extraction and volatile poisons.
3	Learn about analysis and evaluation of volatile poisons.
4	To find out and use resources about the profession in the area.
5	To give lectures and/or presentations and discuss with professionals 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				
P2				4	
P3		4	4	4	
P4	4				
P6	5				
P7		5	5		
P8					4
P9		5	5		
P11					5
P12				4	
P13		4	4		
P14					5

