



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Principles in Pharmacology II (Pharmacokinetic, Pharmacodynamics)							
Course Code		VFT686		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	152 (<i>Hours</i>)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To learn definition and history of pharmacology, dosage information, pharmacokinetic and pharmacodynamic							
Course Content		This course examines the effect of drugs on drug knowledge or science of living systems to introduce the science of pharmacology, drugs, physical and chemical properties and changes in the ways to obtain them in living organisms effect modes used for different purposes for the undesirable effects of options, and the organisms are introduced briefly, the pharmacokinetic part of the after the body and pharmacodynamics of drugs to provide information about changes with time.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, 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	Veterinary Pharmacology and Therapeutics, 8th Edition, Jim E. Riviere (Editor), Mark G. Papich (Editor), 2009.
2	Modern Pharmacology, 6th Edition, Lippincott Williams and Wilkins, 2004 (Ed. C.R. Craig and R.E. Stitzel)
3	Basic and Clinical Pharmacology, 9th Edition, McGraw-Hill, New York, 2004 (Ed. B. Katzung)
4	Goodman and Gilman's The Pharmacological Basis of Therapeutics 11th Edition, McGraw-Hill, 2006 (Eds. Brunton, Lazo, Parker, Buxton and Blumenthal)
5	Lippincott's Illustrated Reviews: Pharmacology, 3rd Edition, Lippincott Williams and Wilkins, 2005 (Eds. Howard, Mycek, Harvey & Champe)
6	The physiological basis of veterinary clinical pharmacology J. Desmond Baggot. Oxford Blackwell Science 2001.
7	Veterinary pharmacology and therapeutics edited by H. Richard Adams. Ames, Iowa State University Press 2001.

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and history of pharmacology
	Practice	Laboratory introduction
2	Theoretical	Drug-poison the relationship
	Practice	Examination of pharmaceutical forms of poisons
3	Theoretical	The pharmaceutical sciences
	Practice	Dose calculations
4	Theoretical	Dose information
	Practice	Dose calculations
5	Theoretical	Pharmacokinetics (absorption)
	Practice	Examination of membranes
6	Theoretical	Pharmacokinetics (Distribution)
	Practice	Examination of membranes
7	Theoretical	Pharmacokinetics (Metabolism)
	Practice	Isolation of liver enzymes
8	Intermediate Exam	Mid-term exam
9	Theoretical	Pharmacokinetics (Breakthrough)
	Practice	Isolation of liver enzymes
10	Theoretical	Forms of drug action
	Practice	Examination of isolated water bath
11	Theoretical	Dose-density relation
	Practice	Observation of dose dependent response at isolated water bath



12	Theoretical	Dose-effect relationship
	Practice	Observation of dose dependent response at isolated water bath
13	Theoretical	Routes of administration
	Practice	Observation of dose dependent response at isolated water bath
14	Theoretical	Drug-drug interactions
	Practice	Examination of pharmaceutical drug interactions
15	Theoretical	Factors modifying the effect of drugs
	Practice	Examination of pharmaceutical drug interactions
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Lecture - Practice	14	1	2	42
Assignment	10	3	2	50
Midterm Examination	1	15	1	16
Final Examination	1	15	1	16
Total Workload (Hours)				152
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To have information about the science of pharmacology and sub-branches of science
2	Grasp the relationship between the drug and poison
3	Pharmacokinetics of drugs and medicines to have information about the changes suffered by the body
4	Effects of the drugs, the dose-intensity and dose-effect relationship between the grasp
5	Factors modifying the effect of the drugs

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	4	3	4	5	3
P4	5		5	5	
P5	4	5	4	4	4
P8	4	4			
P9	5	4	5	5	5
P14		3	5	5	

