



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Pharmacokinetics of Intramammar Drugs and Their Use in Mastitis							
Course Code		VFT664		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	4	Workload	98 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To learn the drugs used in mastitis, evaluation of mastitis drugs, selection of drugs in mastitis and therapy choices in mastitis							
Course Content		Drugs used in mastitis and their pharmacokinetics, evaluation of mastitis drugs, pharmacokinetics of intramammar drugs, selection of drugs in mastitis and therapy 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	Adams H.R. (1995). Veterinary Pharmacology and Therapeutics, Iowa University Press
2	Andrews AH.(2004). Bovine Medicine and Husbandry of Cattle. Oxford: Blackwell Science, 2004:1035-44.
3	Toutain P-L, Ferran A, Bousquet-Mélou A. (2010). Species Differences in Pharmacokinetics and Pharmacodynamics. Comparative and Veterinary Pharmacology. In: Cunningham F, Elliott J, Lees P, editors: Springer Berlin Heidelberg.
4	Kaya S. (2009).Veteriner Uygulamalı Farmakoloji. Alınmıştır: Kaya S, editor. Veteriner Farmakoloji. 5 ed. Ankara: Medisan Yayınevi. 3. Kaya S. (2008). Tıbbi Botanik ve Tıbbi Bitkiler, Medisan-2008

Week	Weekly Detailed Course Contents	
1	Laboratory	Counting somatic cell
2	Theoretical	The anatomy and physiology of the mammary gland
	Practice	Anatomical examination of mammary gland
3	Theoretical	Microorganism of the mastitis
	Laboratory	Examination at microbiology laboratory.
4	Theoretical	General therapy guidelines in mastitis
	Practice	Examination of mastitis drugs.
5	Theoretical	Specifications requirement of the mastitis drugs
	Practice	Pharmacological effects of used drugs in mastitis.
6	Theoretical	Pharmacokinetics of the drugs at the mammary gland
	Practice	Pharmacokinetic calculations at mastitis.
7	Intermediate Exam	Midterm exam
8	Theoretical	Therapy of the lactational cycle mastitis
	Practice	Usage of drugs at lactational mastitis.
9	Theoretical	Therapy of the dry cycle mastitis
	Practice	Drug usage at dry period mastitis.
10	Theoretical	Drug usage at acute mastitis
	Practice	Drug usage at acut mastitis.
11	Theoretical	Drug usage at subacute mastitis
	Practice	Drug usage at subacute mastitis
12	Theoretical	Supportive therapy at mastitis
	Practice	Supportive therapy at mastitis
13	Theoretical	Elimination of dugs from mammary gland
	Practice	Calculation of drug elimination.
14	Theoretical	Preventive measures in mastitis



14	Practice	Preventive measures in mastitis
15	Theoretical	Generally assessment
	Practice	Generally assessment
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Lecture - Practice	14	1	2	42
Laboratory	2	1	2	6
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				98
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Aetiology of mastitis
2	Drugs used at dry and lactation cycles
3	Preventive mastitis applications in animals
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	5	4		
P2	4	4	4	5	
P3	4	4	4	5	
P4	4	4	4		



P5	4	4	4		
P6	4	4	4		
P7	5	5	4		
P8	4	4	4		4
P9	4	4	4		
P10	5	5	5		
P11	4	4	4		5
P12	4	4	4	5	
P13	4	4	4		
P14	4	4	4		5
P15	4	4	4		
P16	4	5	4		

