



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Applications and Usage of Drugs in Poultry							
Course Code		VFT662		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 gastrointestinal physiology and the importance of poultry, the general rules for drug use in poultry, poultry pharmacokinetics of drugs, drug elimination, drug application, with the importance of vaccination and the major drug groups used in poultry (antibacterial, antiparasitic, feed additives and growth promoters, vitamins and mineral substances, antiseptics and disinfectants, antifungals, and vaccines) and the properties and uses.							
Course Content		Gastrointestinal physiology and the importance of poultry, the general rules for drug use in poultry, poultry pharmacokinetics of drugs, drug elimination, drug application, with the importance of vaccination and the major drug groups used in poultry (antibacterial, antiparasitic, feed additives and growth promoters, vitamins and mineral substances, antiseptics and disinfectants, antifungals, and vaccines, etc.) and their properties are studied with the use.							
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	Veterinary Pharmacology and Therapeutics, H. Richard ADAMS; Iowa University Press, 1995.
2	Veterinary Pharmacology and Therapeutics, 8th Edition, Jim E. Riviere (Editor), Mark G. Papich (Editor), 2009.
3	Modern Pharmacology, 6th Edition, Lippincott Williams and Wilkins, 2004 (Ed. C.R. Craig and R.E. Stitzel)
4	Basic and Clinical Pharmacology, 9th Edition, McGraw-Hill, New York, 2004 (Ed. B. Katzung)
5	The physiological basis of veterinary clinical pharmacology J. Desmond Baggot. Oxford Blackwell Science 2001.

Week	Weekly Detailed Course Contents	
1	Theoretical	Gastrointestinal physiology and the importance of different avian species
	Practice	Examination of the anatomical structure of the gastrointestinal tract in poultry
2	Theoretical	Gastrointestinal physiology and the importance of different avian species
	Practice	Examination of the anatomical structure of the gastrointestinal tract in poultry
3	Theoretical	General rules regarding the use of drugs in poultry
	Practice	Pharmacokinetic calculations in poultry
4	Theoretical	The pharmacokinetics of drugs in poultry
	Practice	Pharmacokinetic calculations in poultry samples
5	Theoretical	The elimination of drugs in poultry
	Practice	Routes of administration of drugs in poultry
6	Theoretical	Drug delivery methods in poultry
	Practice	Examination of field conditions, winged forms of drug application in poultry industry
7	Theoretical	Article discussion
	Practice	Paper presentation
8	Intermediate Exam	Midterm exam
9	Theoretical	And properties of the antibacterial drugs used in poultry
	Practice	Antibacterial drug applications in poultry
10	Theoretical	Antiparasitic drugs used in poultry and their properties
	Practice	Antiparasitic drug applications in poultry
11	Theoretical	Drugs used in poultry feed additives and the development and characteristics of the accelerator
	Practice	Accelerating growth in poultry feed additives and pharmaceutical applications



12	Theoretical	Properties of vitamin and mineral substances used in poultry
	Practice	Vitamins and minerals in poultry applications
13	Theoretical	Antiseptic and disinfectant properties of drugs used in poultry and
	Practice	Pharmaceutical applications of antiseptics and disinfectants in poultry
14	Theoretical	Characteristics and features of antifungal drugs used in poultry vaccines and
	Practice	Antifungal drug and vaccine applications in poultry
15	Theoretical	Article discussion
	Practice	Article discussion Paper presentation
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Lecture - Practice	14	3	2	70
Individual Work	10	2	1	30
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Learn about on the importance of gastrointestinal physiology in poultry.
2	Learn about the general rules regarding drug use in poultry.
3	Learn about the pharmacokinetics of drugs in poultry, the elimination of drug administration, vaccination, and the importance.
4	Learn about poultry used drug classes, the features and use.
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			
P4	4		4	4	
P5			5	5	
P6			4	4	
P7		4	4	4	
P8					5
P10			4	4	
P11			4	4	5
P13			4	4	
P14					5

