



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Growth Promoters							
Course Code		VFT657		Couese Level		Third Cycle (Doctorate Degree)			
ECTS Credit	4	Workload	106 (<i>Hours</i>)	Theory	1	Practice	0	Laboratory	0
Objectives of the Course		To learn growth promoters like hormones, hormone like compounds, chemotherapeutics, minerals, vitamins, and modulators of rumen digestion and some of neuroleptics.							
Course Content		Course Content Hormones, hormone like compounds, chemotherapeutics, minerals, vitamins, and modulators of rumen digestion and some of neuroleptics are examined.							
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	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.

Week	Weekly Detailed Course Contents	
2	Theoretical	Aim of drugs and drug like compounds
3	Theoretical	Antibiotics
4	Theoretical	Harmful effects of antibiotic usage
5	Theoretical	Anabolic substances
6	Theoretical	Anabolic substances: application types
7	Intermediate Exam	Midterm exam
8	Theoretical	Anabolic substances: mode of action
9	Theoretical	Anabolic substances: usage
10	Theoretical	Anabolic substances: safety and side effects
11	Theoretical	Anabolic substances: eustrogenic and androgenic anabolisans
12	Theoretical	Anabolic substances: eustradiol 17 beta, testosterone, progesterone, trenbolone and zeranole
13	Theoretical	Anabolic substances: stilbene derivatives, growth hormone and receptor stimulants
14	Theoretical	Anabolic substances: vitamins, minerals and other substances
15	Theoretical	Generally assessment
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Individual Work	5	2	2	20
Midterm Examination	1	20	2	22
Final Examination	1	20	2	22
Total Workload (Hours)				106
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	To learn the effects and mode action of growth promoters
2	Usage of growth promoters
3	To inform about the side and harmful effects of growth promoters
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	4	
P3	4	4	4	4	
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	5	5	4		
P16	4	4	4		

