AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Centrally Acting Muscle Relaxants and Central Nervous System Stimulants						
Course Code	VFT629		Couse Level	Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	147 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Central Nervous System (CNS)-acting muscle relaxants and drugs that stimulate the central nervous system and their classification, effects and forms of knowledge regarding the clinical application areas.						
Course Content	Central Nervous System (CNS)-acting muscle relaxants and drugs that stimulate the central nervous system and their classification, effects and forms of usage are examined with the clinic.						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study						
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	Veterinary Pharmacology and Therapeutics, H. Richard ADAMS; Iowa University Press, 1995.
5	Goodman and Gilman's The Pharmacological Basis of Therapeutics 11th Edition, McGraw-Hill, 2006 (Eds. Brunton, Lazo, Parker, Buxton and Blumenthal)
6	Lippincott's Illustrated Reviews: Pharmacology, 3rd Edition, Lippincott Williams and Wilkins, 2005 (Eds. Howard, Mycek, Harvey & Champe)
7	The Veterinary Formulary edited by Yolande Bishop. London Pharmaceutical Press in association with the British Veterinary Association 2001.

Week	Weekly Detailed Course Contents	
1	Theoretical	Muscle structure, function and effects
2	Theoretical	Innervation of muscle and nerve stimulation
3	Theoretical	Innervation of muscle and nerve stimulation
4	Theoretical	Central Nervous System (CNS) impact of muscle relaxants effective forms
5	Theoretical	CNS-acting muscle relaxants, properties and uses
6	Theoretical	CNS-acting muscle relaxants, properties and uses
7	Theoretical	article discussion
8	Intermediate Exam	Midterm exam
9	Theoretical	Efficient neuro-regulators of CNS stimulation, transmission
10	Theoretical	CNS, synthesis and effects
11	Theoretical	CNS effects of neuro-regulators
12	Theoretical	The results of the central nervous system and the possible effects of stimuli
13	Theoretical	CNS stimulating agents, properties and uses
14	Theoretical	CNS stimulating agents, properties and uses
15	Theoretical	article discussion
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	2	84
Assignment	5	5	2	35
Midterm Examination	1	12	2	14

Final Examination	1	12	2	14
		Total Workload (Hours)		147
		[Total Workload (Hours) / 25*] = **ECTS**		6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Learn about the muscle structure and properties.
2	With muscle relaxant effects and will have information on use patterns and in the clinic.
3	And the effects of neuro-regulators of central nervous systems learn about acting
4	With drugs that stimulate the central nervous system effects and use patterns and learn about the clinic.
5	To find out and use resources about the profession 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	5	5	
P2					4
P3					5
P5		5	5	5	
P6		4	4	4	
P8	3	3	3	3	
P12					4
P14		4	4	4	