AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Analgesic Drugs								
Course Code	VFT558		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	2	Workload	55 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Teaching of the formation mechanism of pain and pain relief drugs.								
Course Content	Basic concepts related to pain, the pain and the effects of the classification of narcotic and non-narcotic pain reliever drugs, forms of action and clinical uses.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Prof. Cavit KUM								

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 Veterinary Formulary edited by Yolande Bishop. London Pharmaceutical Press in association with the British Veterinary Association 2001.
7	Pharmacology. Franklin A. Ahrens. Baltimore, Md. London Williams & Wilkins 1996.
8	The physiological basis of veterinary clinical pharmacology J. Desmond Baggot. Oxford Blackwell Science 2001.

Week	Weekly Detailed Course Contents	
1	Theoretical	Occurrence of pain
2	Theoretical	Pain in the formation of local events
3	Theoretical	Substances that are secreted in Pain
4	Theoretical	Information about the salicylic acid derivatives
5	Theoretical	Information about the propionic acid derivatives
6	Theoretical	pyrazolone derivative
7	Theoretical	Acidic acid derivatives
8	Intermediate Exam	Midterm exam
9	Theoretical	Nikotonik acid derivatives
10	Theoretical	Oksikam derivatives
11	Theoretical	Adrenergic receptor stimulants
12	Theoretical	Gold Compounds
13	Theoretical	Narcotic pain relievers
14	Theoretical	Narcotic pain relievers antagonists
15	Theoretical	discussion
16	Final Exam	Final

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Midterm Examination	1	6	1	7

Final Examination	1	5	1	6
			Total Workload (Hours)	55
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Learns the formation mechanisms of pain.
2	Learn the mechanism of action of drugs for pain relief.
3	To obtain information on pain medications.
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 *(Veterinary Pharmacology and Toxicology Master's Without Thesis)*	
1	to be able to comprehend expert knowledge on field of pharmacology and toxicology in veterinary medicine
2	to be able to define expert knowledge on interdisciplinary interaction in pharmacology and toxicology
3	to be able to formulate ideas to solve complex problems using theoretical and practical information gained throughout the pharmacology and toxicology education
4	to be able to integrate and interpret information in the area of pharmacology and toxicology with information in different fields and, if the need arises, provides scientific information and solutions to solve problems.
5	to be able to develop and use strategies in his/her field of expertise in Master’s Program of Pharmacology and Toxicolog
6	to be able to comprehend methods of obtained and submitted scientific knowledge
7	to be able to analyse current information related to his/her field of expertise (scientific information, procedures etc.) and use them when necessary.
8	to be able to apply technological tools in social relationships of vocational and professional environment
9	to be able to review, evaluate and interpret any data (field observations, available scientific information etc.) towards a specific purpose.
10	to be able to comprehend 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.
11	to be able to identify expert knowledge on the function and basic toxicological features of poison, classifications and types of poisoning, toxicokinetic, general principles of treatment of poisoning
12	to be able to define and use laboratory equipment in a pharmacology and toxicology laboratory.

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		
P3		4	4		4
P4					4
P5	3	4	3		5
P6				5	5
P7				5	
P8					5
P9				5	5
P10	5	5	5		
P11	4	4	4		