AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Basic Principles in Pharmacology-I (Basic Principles, Drugs and Orgins of Drugs)								
Course Code	VFT601		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	6	Workload	150 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	This course aims to provide information on the sources of drugs and chemical drugs have knowledge about the relationship between structures and the effects they produce.								
Course Content	Drug resources (natural source medicines, produced from the Reasons of synthesis (synthetic and semi-synthetic), DNA-recombinant technology (gene cloning) produced drugs, structure-activity relationship, agonist-antagonist and the concept of isomer.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Project Based Study, Individual Study								
Name of Lecturer(s)	Prof. Ferda AKAR								

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	Goodman and Gilman's The Pharmacological Basis of Therapeutics 11th Edition, McGraw-Hill, 2006 (Eds. Brunton, Lazo, Parker, Buxton and Blumenthal)
4	Lippincott's Illustrated Reviews: Pharmacology, 3rd Edition, Lippincott Williams and Wilkins, 2005 (Eds. Howard, Mycek, Harvey & Champe)

Week	Weekly Detailed Course Contents	
1	Theoretical	According to sources of the drugs
2	Theoretical	Plant-based drugs (Alkaloids)
3	Theoretical	Plant-based drugs (glycosides) oils, tannins, resins, balsams, gums
4	Theoretical	Plant-based drugs (oils and tannins)
5	Theoretical	Plant-based drugs (resins, balsams, gums)
6	Theoretical	Animal and micro-organism derived drugs
7	Theoretical	Produced from the Reasons of synthesis (synthetic and semi-synthetic)
8	Intermediate Exam	Mid-term exam
9	Theoretical	Mining induced and recombinant DNA technology (gene cloning) produced drugs
10	Theoretical	Antibiotics from micro-organism to achieve
11	Theoretical	Structure-activity relationship
12	Theoretical	Agonist-antagonist
13	Theoretical	İsomerism
14	Theoretical	Geometric and optical isomerism
15	Theoretical	Discussion
16	Final Exam	Final

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	2	70
Assignment	2	2	2	8
Individual Work	14	2	2	56
Midterm Examination	1	4	2	6

Final Examination	1	8	2	10
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Drug to learn about the sources of
2	Create structures and pharmacological effects of the drugs to be informed about the relationship between
3	To learn knowledge and propose suggestions on the area
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	4	5			
P2				4	
P3	4	5	4	5	
P4	4	5	5		
P5	5	4			
P8					4
P11			4		5
P12				4	
P14	4	4	4		5