



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Computer Applications in Pharmacology and Toxicology							
Course Code		VFT644		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	150 (<i>Hours</i>)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To teach new developments in pharmacology and toxicology and related new informatic technologies.							
Course Content		New developments in pharmacology and toxicology and related new informatic technologies, application of drug developing stage and their usage with informatic areas are examined.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, 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	Veteriner Hekimliğinde ilaç kullanımına pratik ve akılcı yaklaşım, Bünyamin TRAŞ, Enver YAZAR, Muammer ELMAS, KONYA-2007
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	Goodman and Gilman's The Pharmacological Basis of Therapeutics 11th Edition, McGraw-Hill, 2006 (Eds. Brunton, Lazo, Parker, Buxton and Blumenthal)
5	Multiple choice questions in Clinical Pharmacology, 2001, Mant, Lewis and Ritter. Arnold.
6	Pharmacokinetic Program Applications - Pharmacokinetic / pharmacodynamic modeling program

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to computers
	Practice	Computer and its equipment
2	Theoretical	Computer hardware and software - 1
	Practice	Examination of computer hardware and software - 1
3	Theoretical	Computer hardware and software - 2
	Practice	Examination of computer hardware and software - 2
4	Theoretical	Computer hardware and software - 3
	Practice	Examination of computer hardware and software - 3
5	Theoretical	The computer software packages - 1
	Practice	Research of the software package - 1
6	Theoretical	The computer software packages - 2
	Practice	Research of the software package - 2
7	Theoretical	Article discussion
	Practice	Research of the software package - 3
8	Intermediate Exam	Midterm exam
9	Theoretical	Computer software packages in pharmacodynamic analysis - 1
	Practice	The use of computer software packages in pharmacodynamic analysis - 1
10	Theoretical	Computer software packages in pharmacodynamic analysis - 2
	Practice	The use of computer software packages in pharmacodynamic analysis - 2
11	Theoretical	Computer software packages in pharmacodynamic analysis - 3
	Practice	The use of computer software packages in pharmacodynamic analysis - 3
12	Theoretical	Computer software packages in pharmacodynamic analysis - 4



12	Practice	The use of computer software packages in pharmacodynamic analysis - 4
13	Theoretical	Computer software packages in pharmacodynamic analysis - 5
	Practice	The use of computer software packages in pharmacodynamic analysis - 5
14	Theoretical	Related softwares for thesis
	Practice	Research of the related softwares for thesis - 1
15	Theoretical	Discussion
	Practice	Research of the related softwares for thesis - 2
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	1	42
Lecture - Practice	15	2	2	60
Assignment	2	10	1	22
Midterm Examination	1	11	1	12
Final Examination	1	13	1	14
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To learn new developments in pharmacological and toxicological analysis
2	To learn computer software used in pharmacology and toxicology
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	3	4			
P2				4	
P3	4	4	5	5	
P5	5	5	5		
P8	4	4			5
P11			5		5
P12				5	
P13		4			
P14	4	4	5		5

