



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Plant Poisons and Their Analysis							
Course Code		VFT645		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	150 ( <i>Hours</i> )	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To learn the effects of plant poisons, alkaloids, glycosides, analysis procedures subjects and effects.							
Course Content		Plant poisons, alkaloids, glycosides, analysis procedures subjects and effects are examined.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, 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	Casarett & Doull's Toxicology - The Basic Science of Poison. McGraw-Hill Press
2	Hayes, WA (2007) Principles and Methods of Toxicology, 5th Edition, Taylor and Francis, London.
3	Hodgson, E (2010) A textbook of modern toxicology, 4 th Edition, John Wiley and Sons, Inc., Hoboken, Canada.
4	Gupta, R.C. Veterinary Toxicology - Basic and Clinical Principles. Academic Press
5	Klaassen, C. (2008) Casarett & Doull's Toxicology: The Basic Science of Poisons, 7th Edition, McGraw-Hill Companies, USA.

Week	Weekly Detailed Course Contents	
1	Theoretical	Plant poisons and their analysis
	Practice	Basic materials used in the analyzes of vegetable poisons
2	Theoretical	Herbal alkaloids
	Practice	Alkaloids and their analysis
3	Theoretical	Herbal glycosides
	Practice	Glycosides and their analysis
4	Theoretical	Herbal glucocinolates
	Practice	Glucocinolates and their analysis
5	Theoretical	Herbal phenolic compounds
	Practice	Phenolic compounds and their analysis
6	Theoretical	Herbal eustrogenic plants
	Practice	Eustrogenic plants and their analysis
7	Theoretical	Herbal poisonous proteins and peptides
	Practice	Poisonous proteins and peptides and their analysis
8	Intermediate Exam	Midterm exam
9	Theoretical	Herbal latirogens
	Practice	Latirogens and their analysis
10	Theoretical	Poison effects of vitamins
	Practice	Some vitamins and their analysis
11	Theoretical	Usage of compounds that effect vitamin
	Practice	Usage of compounds that effect vitamin and their analysis
12	Theoretical	Poisonous fatty acids
	Practice	Poisonous fatty acids and their analysis
13	Theoretical	Herbal resins or resinoids
	Practice	Resins or resinoids and their analysis



14	Theoretical	Herbal other substances
	Practice	Discussion
15	Theoretical	Discussion and generally assessment
	Practice	Discussion and generally assessment
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	8	1	18
Midterm Examination	1	13	1	14
Final Examination	1	15	1	16
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

**Learning Outcomes**

1	To learn the plant poisons
2	To learn the harmful effects of plant poisons
3	To learn the analysis of plant poisons
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				
P2				4	
P3		4	4	4	



P4	4				
P6	5				
P7		5	5		
P8					4
P9		5	5		
P11					5
P12				4	
P13		4	4		
P14					5

