

Module title:	Clinical toxicology of small animals	ECTS	1
Polish translation:	Kliniczna toksykologia małych zwierząt		
Course:	Veterinary Medicine		

Module language: English		Stage: JM-FVM	
Form of studies: ☒ intramural ☐ extramural	Type of module: ☐ basic ☒ directional	☐ mandatory ☒ elective	Semester: 9 ☒ winter semester ☐ summer semester
Academic year:		Intake 2022/2023	Catalogue number:

Module coordinator:		Dr hab. Marta Mendel, prof. SGGW		
Teachers responsible for the module:		Academic teachers of the Faculty of Veterinary Medicine; Department of Preclinical Sciences. PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study		
Course Description:		During the course, the student acquires detailed information on the most common poisonings noticed in small animals (dogs and cats), including prevention, diagnostics, and treatment. Lecture content; Introduction to clinical toxicology of dogs and cats; Epidemiology of the most frequent poisonings in dogs and cats; Detailed characteristics of anticoagulant rodenticides (3 hours); Toxicology of other non-anticoagulant rodenticides: cholecalciferol and bromethalin, strychnine (2 hours); Detailed characteristics of metaldehyde intoxication in dogs and cats. Differential diagnostics in neurologic patient (2 hours); Detailed characteristic of poisoning caused by ethylene glycol and other organic solvents in dogs and cats (2 hours); Toxicological significance of house-hold products, narcotics and OTC drugs (2 hours); Detailed characteristics of toxic plants (outdoor and indoor plants) and animals' toxins (2 hours); Toxicology of iron, copper and zinc (intoxications and inherited diseases). (2 hours).		
Teaching forms, number of hours:		a) Lectures; hours: 15 b) Laboratory classes; hours ...; c) Seminars; hours ...; d) Clinical laboratories; hours ...; e) Field exercises; hours ...;		
Teaching methods:		• Original multimedia presentations prepared by academic teachers which link theoretical knowledge with practical aspects of veterinary profession • Discussions initiated by the teachers • Videos presenting clinical symptoms of poisonings in cats and dogs • Consultations (7 h in semester) Detailed schedule will be defined by the coordinator of the course at the beginning of semester. Detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester.		
Formal prerequisites and initial requirements:		Passing the courses: Toxicology		
Learning effects		Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*
Knowledge:	1	A graduate knows the most common poisonings reported in dogs and cats, including their causes and manifestations,	A.W.21, A.U.17 B.W.1, B.W.2, B.W.3	3 1
	2	A graduate knows and understands the diagnostic rules and non-specific and specific therapy protocols used in acute and chronic poisonings,	A.W.21 A.W.16, B.W.4	3 2
	3	A graduate knows the consequences of incorrect dosing of mineral and phytogetic feed additives in companion animals,	A.W.16	2
Skills:	1	A graduate is able to collect toxicological data, including data specific for individual animal species,	A.U.12, A.U.13 B.U.2	1 2
	2	A graduate is able to select samples and diagnostic tests to confirm a poisoning,	B.U.6, B.U.23	2
	3	A graduate can choose the most suitable therapy protocol in acute and chronic poisonings,	B.U.13	2

	4	A graduate is able to perform a differential diagnostic process in case of poisoning suspicion	B.U.6	1	
Competences:	1	A graduate is prepared to make a decision in a situation of chemical hazard (decide about therapy protocols for affected animals and personal protective equipment for individuals involved),	K.S.1, K.S.5, K.S.10	2	
	2	A graduate is prepared to advise animal owners regarding the safe use of mineral and phytogetic feed additives,	K.S.9	1	
	3	A graduate is ready to critically interpret the results of laboratory tests in case of toxicological analysis	K.S.7	1	
Objectives of the module required to obtain learning effects:		During the course, a student acquires detailed knowledge in the field of clinical toxicology of small animals, including the prevention, diagnosis, and treatment of animal poisonings in dogs and cats. Special attention is being paid to differential diagnostics within toxicology and beyond.			
Assessment methods:		All lectures are obligatory. Those with attendance of 5 or more lectures will benefit from the final test. One verification (written) test at the end of semester – 3 questions for frequent attenders of the lectures or 4 questions for all other students. To pass the test, one must obtain at least 51% of the total points (at least 8 out of 15 points, or 10.5 out of 20 points in the case of 3 and 4 questions, respectively). Grading scale:			
		3-question test		4-question test	
		Number of points:		Grade	
		0 – 7.5		2 (insufficient)	
		8.0 – 9.0		3 (sufficient)	
		9.5 – 10.5		3.5 (sufficient +)	
		11.0 – 12.0		4.0 (good)	
		12.5 – 13.5		4.5 (good +)	
		14.0 – 15.0		5.0 Very good)	
		A failed test can be repeated once. No extra assessment methods are anticipated.			
		In case of unforeseen or unusual circumstances, mandatory remote teaching and assessment methods might be adopted.			
Detail description of assessment methods;		No extra assessment methods are anticipated.			
Formal documentation of learning outcome:		eHMS entry. Records collected in the course portfolio, i.e., individual records of student results, presence lists, database of oral and written questions, and written assessments of the students.			
Elements impelling final grade:		Final grade is equal to the grade of the final test			
Teaching base:		Lecture facilities of the Faculty of Veterinary Medicine			
Mandatory and supportive materials : 1. Small Animal Toxicology, 3rd Edition , ed. Patricia A. Talcott & Michael E. Peterson, Elsevier, 2012 2. Blackwell’s Five-Minute Veterinary Consult Clinical Companion: Small Animal Toxicology, ed. Hovda, Brutlag, Poppenga, Peterson, Wiley Blackwall, 3. Clinical Veterinary Toxicology, ed. KH Plumlee, Mosby, 2004 4. Blackwell's Five-Minute Veterinary Consult Clinical Companion: Small Animal Toxicology, 3rd Edition; red. Hovda et al., 2024 5. Small Animal Toxicology Essentials, ed. Robert H. Poppenga, Sharon M. Gwaltney-Brant, Wiley, 2011 6. Carpenter's Exotic Animal Formulary 6th Edition , ed. James W. Carpenter, Craig Harms, Saunders, 2022 7. Common Toxicologic Issues in Small Animals: An Update, An Issue of Veterinary Clinics of North America: Small Animal Practice, ed. Stephen B. Hooser & Safdar A. Khan, Elsevier, 2018					
Relevant scientific publications, including those of the module coordinator.					
ANNOTATIONS					

* 3 – complete and detailed, 2 – moderate, 1 – basic.

Quantitative summary of the module:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module - base for quantifying ECTS:	30 h
Total ECTS points, accumulated by students during contact learning:	1 ECTS