

Module title:	Clinical and laboratory diagnostics in animal emergency veterinary medicine	ECTS	1
Polish translation:	Podstawy diagnostyki klinicznej i laboratoryjnej stanów nagłych		
Course:	Veterinary Medicine		

Module language: English		Stage: JM-FVM	
Form of studies: <input checked="" type="checkbox"/> intramural <input type="checkbox"/> extramural	Type of module: <input type="checkbox"/> basic <input type="checkbox"/> directional <input type="checkbox"/> mandatory <input checked="" type="checkbox"/> elective	Semester: 10	<input type="checkbox"/> winter semester <input checked="" type="checkbox"/> summer semester
Academic year:		Intake 2021/2022	Catalogue number: FVM-V-JMSS-10S-ED02_20

Module coordinator:	Dr n. wet. Agnieszka Wrzesińska			
Teachers responsible for the module:	Dr n. wet. Agnieszka Wrzesińska Academic teacher of the Institute of Veterinary Medicine; Department of Small Animal Diseases and Clinic; specialist in the field of study			
Course Description:	<p>The aim of the course is to teach basic diagnostic methods used in animal emergency medicine and to provide knowledge about life-threatening states in animals.</p> <p>The informations and skills previously acquired in the field of clinical and laboratory diagnostics, pathophysiology, pharmacology and dog and cat diseases will be expanded and targeted for emergencies and life-threatening clinical states in companion animals.</p> <p>The course will encompass the following topics:</p> <ul style="list-style-type: none"> - diagnostic evaluation of life-threatening symptoms and principles of cardiopulmonary resuscitation (CPR); (2h) - practical cardiopulmonary resuscitation (1h) - diagnostic evaluation of shock (cardiogenic, hypovolemic, metabolic and anaphylactic); (1h) - diagnostic evaluation of respiratory, cardio-vascular, gastrointestinal, urological, neurological, reproductive, endocrinology, toxicological, thermoregulation emergencies; (6h) - critical care monitoring; (1h) - practical assessment of parameters (ECG, EtCO₂, SpO₂, Temp, RR, HR) on real-time vital signs monitors for diagnosis of cause and therapy (2h) - neonatal critical care; (1h) - fluid therapy and diagnostic evaluation of dehydration emergencies (1h) 			
Teaching forms, number of hours:	a) Lectures; hours ...; b) Laboratory classes; hours ...; c) Seminars; hours 15 d) Clinical laboratories; hours ...; e) Field exercises; hours ...;			
Teaching methods:	Seminars will provide basis for discussion and practical performing CPR, also multimedia lectures and multimedia presentations showing animal life-threatening clinical signs and data collected during interview, clinical examination and laboratory tests.			
Formal prerequisites and initial requirements:	Animal physiology modules 1-2, Animal pathophysiology, Clinical and laboratory diagnostics modules 1-2, Dog and cat disease, Veterinary pharmacology modules 1-2			
Learning effects	Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*	
Knowledge:	1	Knows the basic emergency states that may threat to the animal's life	B.W.2	3
	2	Knows diagnostic options and their application in individual life-threatening conditions	B.W.6	2
	3	Knows symptoms characteristic of individual emergencies	B.W.4	1
Skills:	1	Able to provide appropriate diagnostic procedures depending on the state of emergency and provide adequate treatment	B.U.7;	3
	2	Able to correctly interpret the results of laboratory tests and vital signs on ER monitors	B.U.12	2
	3	Able to perform cardiopulmonary resuscitation	B.U.4	1
Competences:	1	Ability to taking action in a state of stress in which the student must make decisions quickly to save the animal's life	KS.10	1
	2	Competences in cooperation and communication in performing veterinary medicine procedures, e.g. during resuscitation	KS.3	1

Objectives of the module required to obtain learning effects:	<ul style="list-style-type: none"> - Identification of basic emergency states threatening an animal's life and recognition of their characteristic clinical symptoms. - Knowledge of available diagnostic options and their practical application in individual life-threatening conditions. - Ability to select and perform appropriate diagnostic and therapeutic procedures depending on the state of emergency. - Correct interpretation of laboratory test results and vital signs monitored in an emergency room (ER) setting. - Competence in performing cardiopulmonary resuscitation (CPR). - Ability to make quick decisions and take action in stressful situations aimed at saving the animal's life. - Skills in cooperation and effective communication during veterinary procedures, including resuscitation efforts 			
Assessment methods:	Assessment of the assigned task (CPR) and written final test No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.			
Detail description of assessment methods;	...			
Formal documentation of learning outcome:	No extra assessment methods are anticipated. eHMS entry. Records collected in the course portfolio i.e. individual records of student results, presence lists, database of oral and written questions, written assessments of the students.			
Elements impelling final grade:	1 Conditions for taking the exam a) Students must have at least 80% presence at seminars. b) During semester students are required to perform cardiopulmonary resuscitation on the canine CPR simulator 2 Final grade is obtained during exam a) Form of exam – single choice test b) Exam covers material presented during seminars 0%-50% max points – failed (2) 51%-60,0% max points – sufficient (3) 61%-70,0% max points – sufficient plus (3,5) 71%-80,0% max points – good (4) 81%-90,0% max points – very good (4,5) 91%-100% max points – excellent (5)			
Teaching base:	Classrooms, Small Animal Clinic, build 22			
Mandatory and supportive materials :	<ol style="list-style-type: none"> 1. Silverstein D., Hoppe K.: Small Animal Critical Care Medicine, 3rd edition, Saunders, 2022. 2. Kirby R., Rudloff E., Linklater A.: Small Animal Emergency and Critical Care Medicine, Apple Academic Press Inc, 2015. 3. Mazzaferro E.: Emergency and Critical Care of Small Animals, An Issue of Veterinary Clinics of North America: Small animal practice, 2nd edition, Elsevier 2020... 			
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:	15 h
Total ECTS points, accumulated by students during contact learning:	1 ECTS