

Module title:	Farm animals internal diseases	ECTS	5
Polish translation:	Choroby wewnętrzne zwierząt gospodarskich		
Course:	Veterinary Medicine		

Module language: English		Stage: JM-FVM	
Form of studies: ☒ intramural ☐ extramural	Type of module: ☐ basic ☒ directional ☒ mandatory ☐ elective	Semester: 7	☒ winter semester ☐ summer semester
Academic year:		Intake 2022/2023	Catalogue number: FVM-V-JMSS-07W-D25/1_20

Module coordinator:	Małgorzata Wierzbicka, PhD, DVM
Teachers responsible for the module:	Academic teachers of the Institute Veterinary Medicine, Department of Large Animal Diseases with Clinic; PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study
Objectives of the module:	The aim and purpose of the course is to teach students the definition, occurrence, effects of diseases, etiology, pathogenesis, recognition, clinical symptoms, additional tests, differential diagnosis, anatomo-pathological changes, complications, treatment, prognosis and prevention of internal diseases of farm animals. The program contains information about internal diseases of farm animals, encountered in veterinary practice. The student will receive basic information on how to conduct environmental and disease anamnesis, recognition, including the use of laboratory and imaging tests, treatment and prevention of diseases. Lecture topics: Selected issues of veterinary dermatology, mycoses and parasitic diseases. (2 hours). Selected issues of cardiovascular disease. (2 hours). Selected issues of respiratory diseases; upper respiratory tract diseases. (2 hours). Selected issues of respiratory diseases; pulmonary and pleural diseases. (2 hours). Selected issues of urinary system diseases; non-infectious and infectious diseases of the kidneys, ureters and bladder. (2 hours). Selected issues of diseases of the central and peripheral nervous system. (2 hours). Selected issues from diseases caused by vitamin deficiencies. (2 hours). Selected issues from diseases caused by deficiencies in micro- and macroelements (2 hours). Selected issues of metabolic diseases, ketosis, fatty liver (2 hours). Selected issues of veterinary pediatrics of newborn livestock (2 hours). Selected issues of metabolic diseases, Ca, P and Mg deficiencies (2 hours). Selected issues of gastrointestinal diseases; diseases of the mouth, throat and esophagus. (2 hours). Selected issues of gastrointestinal diseases; stomach and abomasum diseases (2 hours). Selected issues of gastrointestinal diseases; simple, alkaline and acid dyspepsia (2 hours). Selected issues of gastrointestinal diseases; bowel disease. (2 hours). Laboratory topics: Veterinary dermatology - diagnosis and treatment of selected non-infectious and allergic diseases farm animals. (3 hours) Clinical differential diagnosis and treatment of livestock respiratory diseases. (6 hours) Clinical differential diagnosis and therapy of livestock circulatory system diseases (3 hours) Gastrointestinal diseases - differential diagnosis, diagnosis and treatment of livestock diseases. (9 hours) Excretory system diseases - diagnosis and treatment of livestock urinary system diseases. (3 hours) Clinical, differential and therapy of nervous system diseases. (3 hours) Metabolic disorders – clinical signs, diagnosis and treatment of metabolic diseases of farm animals. (9 hours) Principles of fluid therapy in farm animals. (3 hours) Analysis of laboratory results in farm animals. (3 hours) Differential clinical diagnosis and treatment of diseases of young farm animals. (3 hours) The content of the lectures supplements the content of the laboratory classes.
Teaching forms, number of hours:	a) Lectures; hours 30; b) Clinical laboratories; hours 45;
Teaching methods:	Lectures: multimedia presentations by IMW employees responsible for conducting lectures. Clinical classes: conducting clinical examination of animals, treatment of clinical cases, analysis of test results Consultations for students - 1h / week. The manner of organizing consultations will be determined by the subject coordinator at the beginning of the 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:	

		Knowledge of anatomy, animal physiology, biochemistry, clinical and laboratory diagnostics, pharmacology, animal nutrition, pathophysiology,		
Learning effects		Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*
Knowledge:	1	Student knows the pathomechanisms and clinical course of diseases	B.W.3	2
	2	Student knows the rules for conducting interviews and physical examination of animals	B.W.5	3
	3	Student knows the rules for treating diseases	B.W.3	2
	4	Student knows the principles of differential diagnosis of diseases	B.W.4	3
	5	Student knows the principles of disease monitoring based on clinical data and the results of laboratory and additional tests	B.W.6	3
Skills:	1	Student knows how to get history taking about animal's disease and environment	B.U.2	3
	2	Student knows how to safely conduct a veterinary medical examination of the animal	B.U.3; B.U.1	3
	3	Student knows how to coordinate and perform the appropriate detailed examination and additional tests based on the interview and general examination	B.U.4	2
	4	Student knows how to carry out differential diagnostics	B.U.4	3
	5	Student knows how to coordinate appropriate treatment with the patient - including pharmacotherapy, diet therapy	B.U.9, B.U.10, B.U.13	3
	6	Student knows how to conduct medical and veterinary documentation	B.U.6	2
	7	Student knows how to collect material for additional tests and interpret the results obtained	B.U.6	3
Competences:	1	Student is ready to take responsibility for his actions and decisions	KS.1	2
	2	Student presents an attitude consistent with veterinary deontology and the Veterinary Doctor's Code of Ethics	KS.2	1
	3	Student is aware of the continuous development of science and is ready to expand and update knowledge	KS.4	1
Objectives of the module required to obtain learning effects:		The aim and purpose of the course is to teach students the definition, occurrence, effects of diseases, aetiology, pathogenesis, recognition, clinical symptoms, additional tests, differential diagnosis, pathological changes, complications, treatment, prognosis and prevention of internal diseases of farm animals. The program contains information about internal diseases of farm animals, encountered in veterinary practice. The student will receive basic information on how to conduct environmental and disease anamnesis, recognition, including the use of laboratory and imaging tests, treatment and prevention of diseases.		
Assessment methods:		1 written tests, practical (oral) exam, written exam		
Detail description of assessment methods; Formal documentation of learning outcome:		Students are required to complete two written tests per semester (open questions; pass 60% of the points). The individual tests apply the entire material from the lectures, practical and seminar classes preceding the test and the relevant material from basic and supplementary literature. At the end of the semester the student is required to pass an oral practical test completing practical classes. The second test date is in the same form. In order for the student to take the final exam, he / she must obtain positive grades from tests during classes. Written exam checking practical and theoretical knowledge. The criterion for issuing the grade for the written exam: 61-69% - (3,0) 70-76% - (3,5) 77-84% - (4.0) 85-92% - (4.5) 93-100% -(5.0) 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:	To obtain a positive final grade, it is necessary to pass written and practical tests and written final exam. The final grade in the subject is the result of exam (60%) and tests (40%) results.
Teaching base:	Lectures will be conducted in classrooms of the Department of Large Animals and Horse Clinic in Wolica. Clinical laboratories will be conducted in RZD SGGW cattle farm in Obory - Goździe as well as farms and herds of animals dealing with the raising and breeding of farm animals.
Mandatory and supportive materials : 1. Bradford P. Smith. Large animal internal medicine. MOSBY St.Louis London Philadelphia Sydney Toronto, 2005. 2. Steven L. Stockham, Michael A. Scott. Fundamentals of veterinary clinical pathology.Iowa State Press. 2002. 3. Pugh D.G.Sheep and goat medicine. W.B. Saunders Company. Philadelphia, Pennsylvania, 2002. 4. Peek S.F., Divers T.J. Rebhun's Diseases of dairy cattle. Elsevier, 2008. 5. O. M. Radostits, C.C. Gay, K. W. Hinchcliff, P. D. Constable: Veterinary Medicine 10th Edition, Saunders Elsevier, 2007 Relevant scientific publications including those of the module coordinator.	
ANNOTATIONS Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module - base for quantifying ECTS:	

* 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:	100 h
Total ECTS points, accumulated by students during contact learning:	3 ECTS