Module title:	Equine internal diseases	ECTS	3
Polish translation:	Choroby wewnętrzne koni		
Course:	**Veterinary Medicine**		

Module language: English			Stage: JM-FVM		
Form of studies: ■ intramural ☐ extramural	Type of module: ☐ basic ■ directional	■ mandatory ☐ elective	Semester: 8		☐ winter semester ■ summer semester
	Academic year:		**Intake 2022/2023**	Catalogue number:	FVM-V-JMSS-08S-D16/1_22

Module coordinator:	**Małgorzata Wierzbicka, PhD, DVM**
Teachers responsible for the module:	**Academic teachers of the Institute of Veterinary; Department/Laboratory of Large Animal Diseases with Clinic; PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study**
Assumptions, Goals, and Course Description	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 horses. The program contains information about internal diseases of horses, 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: Horse skin diseases; on allergic, parasitic, fungal and neoplastic lesions. (1 hour) Upper respiratory tract diseases; nose, throat, larynx, guttural pouches, paranasal sinuses and trachea diseases. (1 hour) Respiratory diseases of horses; RAO, EIH. (1 hour) Respiratory diseases of horses; pneumonia, pulmonary edema, emphysema. (1 hour) Respiratory diseases of horses; pleural disease. (1 hour) Cardiovascular diseases in horses; heart disease. (1 hour) Cardiovascular diseases; peripheral blood and lymphatic vessels. (1 hour) Diseases of the digestive system of horses - diseases of the mouth, throat and esophagus. (1 hour) Gastrointestinal tract diseases - stomach diseases. (1 hour) Gastrointestinal tract diseases - diseases of the small intestine. (1 hour) Gastrointestinal tract diseases - diseases of the large intestine. (1 hour) Urinary system diseases - non-infectious and infectious diseases of the kidneys, ureters and bladder Central nervous system diseases. (1 hour) Peripheral nervous system diseases. (1 hour) Deficiency diseases. (1 hour) Laboratory topics: Diagnosis, differential diagnosis, treatment and prevention of skin diseases in horses. (2 hours) Upper respiratory tract diseases - diagnosis, differential diagnosis, treatment and prevention. (2 hours) Respiratory diseases - diagnosis, differential diagnosis, treatment and prevention of RAO, EIH. (2 hours) Respiratory diseases - diagnosis, differential diagnosis, treatment and prevention. (pneumonia, pulmonary edema, emphysema and pleural disease). (2 hours) Diagnosis, differential diagnosis, treatment and prevention of cardiovascular disease in horses (2 hours) Diseases of the mouth, throat, esophagus in horses - diagnosis, differential diagnosis, treatment and prevention. (2 hours) Gastric diseases in horses - diagnosis, differential diagnosis, treatment and prevention (2 hours) Small intestine diseases in horses - diagnosis, differential diagnosis, treatment and prevention. (2 hours) Colon diseases in horses - diagnosis, differential diagnosis, treatment and prevention. (2 hours) Urinary tract diseases in horses - diagnosis, differential diagnosis, treatment and prevention. (2 hours) Nervous system diseases in horses - diagnosis, differential diagnosis, treatment and prevention. (2 hours) Laminitis, rhabdomiolysis and other muscle diseases in horses - diagnosis, differential diagnosis, treatment and prevention. (2 hours) Metabolic, endocrine and deficiency diseases in horses - diagnosis, differential diagnosis, treatment and prevention in horses. (2 hours) Foal diseases - diarrhea, respiratory diseases, parasites, weak foal syndrome. (2 hours) The content of the lectures supplements the content of the laboratory classes.
Teaching forms, number of hours:	a) Lectures; hours 15; b) Clinical laboratories; hours 20; c) Laboratories classes hours 10
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 enviroment	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 program includes lectures and clinical labs in the field of equine internal. During the study students acquire knowledge and practical skills in thę field of internal equine diseases: dermatology, cardiology, gastroenterology, urology, neurology, respiratory and metabolic diseases, neonatology and health program of horses.		
Assessment methods:		Students are required to complete one written test 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) 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:		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:		The didactic part of the workshops and lectures will be conducted in classrooms of the Department of Large Animals and Horse Clinic in Wolica. Clinical laboratories will be conducted in Horse Clinic.		

Mandatory and supportive materials : 1. A.M. Johnston: Equine Medical Disorders, Second Edition, Blackwell Scientific Publication, 1994 2. D.H. Lloyd, J.D. Littlewood, J. M. Craig and L.R. Thomsett: Practical Equine Dermatology. Blackwell Science, 2003 3. M. Furr, S. Reed: Equine Neurology. Blackwell Publishing, 2008 4. M. Patteson : Equine Cardiology, Blackwell Science, 1996 5. M. R. Paradis: Equine Neonatal Medicine. Saunders Elsevier, 2006 6. 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

* 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:	**75 h**
Total ECTS points, accumulated by students during contact learning:	**2 ECTS**