



SZKOŁA GŁÓWNA
GOSPODARSTWA
WIEJSKIEGO

Equine diseases - internal diseases

Educational subject description sheet

Basic information

Field of study Veterinary Medicine	Didactic cycle 2023/24
Speciality -	Subject code WETFVMS_D.580.04014.23
Organizational unit Faculty of Veterinary Medicine	Lecture languages english
Study level long-cycle	Mandatory Obligatory subjects
Study form full-time studies	Block Major subjects
Education profile General academic	Disciplines Veterinary medicine
Coordinator	Małgorzata Wierzbicka
Teacher	Małgorzata Wierzbicka
Period Semester 8	Examination Exam
	Activities and hours Lecture: 15 Field exercises: 20 Ćwiczenia kliniczne: 10
	Number of ECTS points 3

Goals

Code	Goal
C1	Program includes lectures and practical exercises from equine internal medicine diseases. During the course students gain knowledge and practical skills from this discipline. Program of the course includes presentation and use of diagnostic and treatment methods of most common internal diseases and disorders. The aim is to provide knowledge on the aetiology and pathogenesis of equine diseases requiring internal treatment, teach to perform clinical diagnosis and examination and apply proper therapeutical procedures.

Entry requirements

Topographic anatomy , Animal physiology 2, Biochemistry 2, Clinical and laboratory diagnostics 2, Veterinary pharmacology 2, Animal nutrition and feeding, Pathophysiology, General surgery and anesthesiology, Clinical and laboratory diagnostics 2, Pathomorphology 3, Diagnostic imaging of large animal

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge - Student knows and understands:			
W1	pathomechanisms and clinical course of diseases	B.W2, B.W3, B.W4, B.W7	Written exam, Oral credit, Assessment of activity during classes
W2	the rules for conducting interviews and physical examination of animals	B.W5	Written exam, Oral credit, Assessment of activity during classes
W3	the rules for treating and prevention diseases	B.W3, B.W4, B.W7	Written exam, Oral credit, Assessment of activity during classes
W4	the principles of differential diagnosis of diseases	B.W3, B.W4, B.W5, B.W6	Written exam, Oral credit, Assessment of activity during classes
W5	the principles of disease monitoring based on clinical data and the results of laboratory and additional tests	B.W4, B.W5, B.W6	Written exam, Oral credit, Assessment of activity during classes
Skills - Student can:			
U1	get history taking about animal's disease	B.U1, B.U2, B.U5	Oral credit, Assessment of activity during classes
U2	safely conduct a veterinary medical examination of the animal	B.U3, B.U5	Oral credit, Assessment of activity during classes
U3	coordinate and perform the appropriate detailed examination and additional tests based on the interview and general examination	B.U2, B.U3, B.U5, B.U6, B.U7	Assessment of activity during classes
U4	conduct medical and veterinary documentation	B.U3	Assessment of activity during classes
U5	collect material for additional tests and interpret the results obtained	B.U3	Oral credit, Assessment of activity during classes
Social competences - Student is ready to:			
K1	take responsibility for his actions and decisions	KS.1	Oral credit, Assessment of activity during classes
K2	presents an attitude consistent with veterinary deontology and the Veterinary Doctor's Code of Ethics	KS.2	Oral credit, Assessment of activity during classes
K3	continuous development of science and is ready to expand and update knowledge	KS.4, KS.5, KS.6, KS.7, KS.8	Oral credit, Assessment of activity during classes

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	1. Cardiovascular system diseases- heart diseases in horse 2. Respiratory tract diseases-part 1 Respiratory tract diseases-part 2 Digestive system diseases -part 1 3. Digestive system diseases -part 2 4. Mineral and vitamin deficiencies in horses 5. Nervous system diseases in horses Foals diseases in horses Urinary system diseases- contagious and non-contagious diseases of kidney, bladder and ureters in horses 6. Skin diseases of horses	W1, W2, W3, W4	Lecture
2.	History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of cardiovascular system. Performing and analysis of ECG and Holter in horses Laboratory test analysis Equine metabolic diseases-differential diagnosis Foals Diseases. History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of upper respiratory tract diseases History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of lower respiratory tract and pleura History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of skin diseases History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of nervous system diseases History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of laminitis and rhabdomyolysis and other muscle diseases History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of urinary system diseases History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of diseases of the mouth, pharynx and esophagus History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of stomach History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of small intestines History taking, general clinical examination, special clinical examination, clinical pathology, differential diagnosis, final diagnosis, treatment and prevention of large intestines Practical exam	W1, W2, W3, W4, W5, U1, U2, U3, U4, U5, K1, K2, K3	Field exercises, Ćwiczenia kliniczne

Course advanced

Activities	Methods of conducting classes
Lecture	Lecture
Field exercises	Problem lecture, E-learning - lecture part, Case study, Presentation, Laboratory (experiment), learning by experiment, Observation
Ćwiczenia kliniczne	Case study, Discussion, Teamwork, Laboratory (experiment), learning by experiment, Field observations

Activities	Examination method	Percentage
Lecture	Written exam	60%
Field exercises	Oral credit	30%
Ćwiczenia kliniczne	Assessment of activity during classes	10%

Activities	Credit conditions
Lecture	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. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.
Field exercises	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.
Ćwiczenia kliniczne	No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.

Literature

Obligatory

1. Current therapy in equine medicine. 6th ed. N.E. Robinson, K.A. Sprayberry. Saunders Elsevier, 2009.
2. Equine Internal, D.B. Sellon, M.B. Reed, M.B. Warwick, Saunders, 2017.
3. Equine dermatology. D.W. Scott, W.H. Miller. Saunders, 2003.

Optional

1. Equine Cardiology, Patterson M. Black Science, 1996
2. Equine internal Medicine, T.S. Mair , T.S. Divers, Apple Academic Press Inc. 2015
3. Manual of equine gastroenterology. T. Mair, T. Divers, N. Ducharme. Saunders, 2002
4. Color Atlas of Diseases and Disorders of the Foals. S.B. McAuliffe, N.M.Slovis. Elsevier, 2010
5. Equine neurology. M. Furr, Reed S. John Wiley and Sons, Inc, 2015

Calculation of ECTS points

Activity form	Activity hours*
Lecture	15
Field exercises	20
Ćwiczenia kliniczne	10
Self-study on the content covered in class	15
Preparation for the exam	15
Student workload	Hours 75
Number of ECTS points	ECTS 3

* hour means 45 minutes

Effects

Code	Content
KS.1	Absolwent jest gotów do wykazywania odpowiedzialności za podejmowane decyzje wobec ludzi, zwierząt i środowiska przyrodniczego
KS.2	Absolwent jest gotów do prezentowania postawy zgodnej z zasadami etycznymi i podejmowania działań w oparciu o kodeks etyki w praktyce zawodowej oraz do wykazywania tolerancji dla postaw i zachowań wynikających z odmiennych uwarunkowań społecznych i kulturowych
KS.4	Absolwent jest gotów do korzystania z obiektywnych źródeł informacji
KS.5	Absolwent jest gotów do formułowania wniosków z własnych pomiarów lub obserwacji
KS.6	Absolwent jest gotów do formułowania opinii dotyczących różnych aspektów działalności zawodowej
KS.7	Absolwent jest gotów do rzetelnej samooceny, formułowania konstruktywnej krytyki w zakresie praktyki weterynaryjnej, przyjmowania krytyki prezentowanych przez siebie rozwiązań, ustosunkowywania się do niej w sposób jasny i rzeczowy, także przy użyciu argumentów odwołujących się do dostępnego dorobku naukowego w dyscyplinie
KS.8	Absolwent jest gotów do pogłębiania wiedzy i doskonalenia umiejętności
B.U1	Absolwent potrafi bezpiecznie i humanitarnie postępować ze zwierzętami oraz instruować innych w tym zakresie
B.U2	Absolwent potrafi przeprowadzić wywiad lekarsko-weterynaryjny w celu uzyskania dokładnej informacji o pojedynczym zwierzęciu lub grupie zwierząt oraz jego lub ich środowisku bytowania
B.U3	Absolwent potrafi przeprowadzać pełne badanie kliniczne zwierzęcia
B.U5	Absolwent potrafi oceniać stan odżywienia zwierzęcia oraz udzielać porad w tym zakresie
B.U6	Absolwent potrafi pobierać i zabezpieczać próbki do badań oraz wykonywać standardowe testy laboratoryjne, a także prawidłowo analizować i interpretować wyniki badań laboratoryjnych
B.U7	Absolwent potrafi stosować aparaturę diagnostyczną, w tym radiologiczną, ultrasonograficzną i endoskopową, zgodnie z jej przeznaczeniem i zasadami bezpieczeństwa dla zwierząt i ludzi oraz interpretować wyniki badań uzyskane po jej zastosowaniu
B.W2	Absolwent zna i rozumie mechanizmy patologii narządowych i ustrojowych
B.W3	Absolwent zna i rozumie przyczyny i objawy zmian anatomopatologicznych, zasady leczenia i zapobiegania w poszczególnych jednostkach chorobowych
B.W4	Absolwent zna i rozumie zasady postępowania diagnostycznego, z uwzględnieniem diagnostyki różnicowej, oraz postępowania terapeutycznego
B.W5	Absolwent zna i rozumie zasady przeprowadzania badania klinicznego i monitorowania stanu zdrowia zwierząt
B.W6	Absolwent zna i rozumie sposób postępowania z danymi klinicznymi i wynikami badań laboratoryjnych i dodatkowych
B.W7	Absolwent zna i rozumie przepisy prawa, zasady wydawania orzeczeń i sporządzania opinii na potrzeby sądów, organów administracji państwowej i samorządowej oraz samorządu zawodowego