

Module title:	Rotation - equine diseases	ECTS	6
Polish translation:	STAŻ - Choroby koni		
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 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-D17_20

Module coordinator:	dr Dominika Domańska			
Teachers responsible for the module:	Academic teachers of the Institute of Veterinary Medicine; Department of Large Animal Diseases and Clinic/Laboratory of Veterinary Epidemiology and Economics; PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study			
Assumptions, Goals, and Course Description	Students take part in field workshops on National Agricultural Support Center farms and horse studs with high number of animals. During workshops students apply knowledge from fields of herd management, reproduction, infectious diseases, internal diseases and surgery. The aim is to provide practical skills required to assess aetiology and pathogenesis of horses' diseases requiring surgical, internal or obstetrical treatment, perform clinical diagnosis and examination and apply proper therapeutic procedures.			
Teaching forms, number of hours:	a) Clinical laboratories; hours 90			
Teaching methods:	<p>Reproduction Practical workshops in university clinic and in the field (farms and studs) with the application of veterinary equipment.</p> <p>Surgery: Practical workshop in cowshed Obory 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</p> <p>Internal medicine: Clinical/laboratory 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.</p> <p>Infectious diseases: Introduction in the horse farm organization, herd management (biosecurity protocols, deworming and prophylaxis protocols). Work with documentation: farm veterinary documentation, horse passport and health documents Direct contact with horses: clinical examination of animals, collection of material for laboratory tests, performing veterinary procedures Consultations (1h/week) Detailed schedule of rotation and detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester.</p>			
Formal prerequisites and initial requirements:	Passing the courses: Animal anatomy, Animal physiology, Veterinary pharmacology, Pathomorphology, Diagnostic imaging, Veterinary microbiology, Animal pathophysiology, Clinical and laboratory diagnostics, General surgery and anaesthesiology, Equine diseases Knowledge of basics of handling of animals, safety rules, general examination of the animal .			
Learning effects	Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*	
Knowledge:	1	Students knows the physiological and pathological mechanisms of horses	B.W.1, B.W.2 B.W.3	3 2
	2	Students knows the clinical manifestations of diseases and knows other diseases with similar clinical appearance	B.W.4, B.W.5 B.W.6, B.W.9	3

			B.W.13	
	3	Students knows the diagnostic schemes and protocols (including differential diagnosis) for equine diseases	B.W.4, B.W.5, B.W.6, B.W.9	3
	4	Students knows the therapeutic schemes and protocols recommended for equine diseases, pharmacodynamics properties of recommended products and the interactions among medicinal products	B.W.6	2
	5	Students knows the principles of conducting clinical trials and monitoring the health status of horses	B.W.4, B.W.5, B.W.6, C.W.3	3
	6	Students knows anatomopathological lesions typical for particular diseases of horses	B.W.3, B.W.1	3
	7	Students knows procedures and applicable legal provisions in the event of suspected or confirmed diseases that are subject of eradication or registration/w mandatory and notifiable	B.W.7, B.W.8, B.W.16, C.W.3, C.W.2	3
Skills:	1	Student is able to describe the mechanisms of equine diseases	A.U.12, B.U.3, B.U.2	3
	2	Student is able to plan the diagnostic procedures (including differential diagnosis) in horses	A.U.12, B.U.6, B.U.1, B.U.3	3
	3	Student is able to plan, implement and monitor the treatment strategies	A.U.11, A.U.12, B.U.1, B.U.9, B.U.13	3
	4	Student is able to diagnose diseases of horses using laboratory diagnostic methods	A.U.12, B.U.2, A.U.19, B.U.1, B.U.3, B.U.6, B.U.20, C.U.2	3
	5	Student is able to conduct a full clinical examination of horses	A.U.12, B.U.6, B.U.1, B.U.3	3
	6	Student is able to collect, secure and properly mark biological samples	B.U.8, B.U.1, B.U.6, A.U.10	3
	7	Student is able to properly conduct an epizootic investigation and eradicate infectious diseases of horses	A.U.12, B.U.1, B.U.13, B.U.19, B.U.20, B.U.21	2
	8	Student is able to supplement and maintain documentation related to veterinary practice in accordance with applicable law	A.U.14, A.U.23, C.U.4	3
	9	Student is able to describe radiographs and correctly interpret the findings, diagnose the most common equine diseases that require surgical intervention	B.U.14, B.U.13, B.U.11, B.W.4, B.W.3	3

Competences:	1	Student critically analyzes the results of research and is ready to use them for diagnostics, treatment and eradication of diseases of horses	K.S.4, K.S.5, K.S.7	3
	2	Student presents an attitude consistent with veterinary deontology and the Veterinary Doctor's Code of Ethics	KS.2	1
	3	Student is ready to take responsibility for his actions and decisions	KS.1	2
	4	Student is aware of the continuous development of science and is ready to expand and update knowledge	KS.4	1
	5	Student works in field conditions and effectively cooperates with co-workers and personnel	KS.9, KS.10	3
Objectives of the module required to obtain learning effects:	Students take part in field workshops on National Agricultural Support Centre farms and horse studs with high number of animals. During workshops students apply knowledge from fields of herd management, reproduction, infectious diseases, internal diseases and surgery. The aim is to provide practical skills required to assess aetiology and pathogenesis of horse diseases requiring surgical, internal or obstetrical treatment, perform clinical diagnosis and examination and apply proper therapeutic procedures. Introduction in the horse farm organization, herd management (biosecurity protocols, veterinary documentation, horse passport and health documents).			
Assessment methods:	Evaluation of practical skills, entries in the Student's Daybook of Summer Practice and Clinical Training, written essay Evaluation of student's activity and knowledge during internship. Project, medical history card, oral/written examination and practical abilities assessment In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.			
Detail description of assessment methods;	No extra assessment methods are anticipated. Project, internship notebook in "Student's Daybook of Summer Practice and Clinical Training", medical history card, exam protocol, grade in the eHMS.			
Formal documentation of learning outcome:	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:	Final grade is the mean result of grades from all four disciplines 1- oral examination and practical abilities assessment 50%, observations of student's activity and knowledge 25%, project, medical history cards 25 %			
Teaching base:	Department of Large Animal Disease with Clinic, horse farms, horse clinics and horse events.			
Mandatory and supportive materials :				
1. Handbook of Veterinary Obstetrics / Peter G. G. Jackson ; il. John Fuller ; Saunders Ltd.;				
2. 2. Veterinary Reproduction and Obstetrics. D.E. Noakes, T.J. Parkinson, G.C.W. England 9th ed. Saunders, Elsevier,				
3. Large Animal Theriogenology. R.F. Youngquist, W.L. Threlfall. 2nd ed. Saunders, Elsevier.				
4. 4. Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. OIE,				
5. Veterinary Medicine 10th Edition, O. M. Radostits, C.C. Gay, K. W. Hinchcliff, P. D. Constable. Saunders Elsevier,				
6. Equine Medical Disorders, A.M. Johnston .Second Edition, Blackwell Scientific Publication, 1994				
7. Practical Equine Dermatology D.H. Lloyd, J.D. Littlewood, J. M. Craig and L.R. Thomsett:. Blackwell Science, 2003				
8. Equine Neurology. M. Furr, S. Reed: Blackwell Publishing, 2008				
9. Equine Cardiology M. Patteson, Blackwell Science, 1996				
10. Equine Neonatal Medicine M. R. Paradis:. Saunders Elsevier, 2006				
11. Veterinary Medicine 10th Edition O. M. Radostits, C.C. Gay, K. W. Hinchcliff, P. D. Constable:, Saunders Elsevier, 2007				
12."Equine infectious diseases 2nd edition, D. C. Sellon & M. T. Long, Saunders, 2013				
13. Infectious Diseases of the Horse: Diagnosis, pathology, management, and public health, JH van der Kolk & EJB Veldhuis Kroeze, Oxford University Press USA, 2013				
14. Infectious Diseases of the Horse Tim S. Mair, R. E. Hutchinson, Equine Veterinary Journal Ltd., 2009				
15. H.E. Veterinary Anatomy Domestic Mammals - Textbook and Color Atlas, Koenig. Blackwell Science. 2006.				
16. Textbook of Veterinary Anatomy K.M. Dyce, Wolfgang O. Sack, C. J. G. Wensing:, 3rd edition. Elsevier. 2002.				
17. Clinical anatomy of the horse H.M. Clayton, P.F. Flood, D.S. Rosenstein: Mosby, Elsevier. 2005.				
18. Illustrated atlas of clinical equine anatomy and common disorders of the horse. R.J. Riegel, S.E. Hakolan: 1999, Equiston publication, vol.1 and 2.				
19. The equine distal limb. J.M. Denoix:, Manson Publishing, 2002.				
20. Lameness of the horse M. Ross, S. Dyson:. 2003.				
21. Equine surgery, J. Auer, J. Stick, Saunders Elsevier, 2006.				
22. Lameness in horses T.S. Stashak Adams. Lea and Febiger, 1987.				
23. www.oie.int				
24. www.aaep.org				
25. www.defra.gov.uk				
26. www.isid.org				

27. www.thehorse.com

28. www.beva.org.uk

Journals: Theriogenology, Animal Reproduction Science, Reproduction of Domestic Animals, Biology of Reproduction, Reproduction, Fertility and Sterility, Reproductive BioMedicine Online, Archives of Andrology, International Journal of Andrology, Andrology

Relevant scientific publications including those of the module coordinator.

ANNOTATIONS

Student's Daybook of Summer Practice and Clinical Training

The necessary condition for participation in classes is the possession of accident insurance (in Polish: Ubezpieczenie NNW).

* 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:	4 ECTS