Module title:			Farm animals diseases		ECTS	15		
Polish translation:			Choroby zwierząt gospodarskich					
Course:			Veterinary Medicine					
Module language:			Fnglish	Stage: JM-FVM				
Form of Intramural			Type of basic mandatory	Semester: 7				
	extram		module: directional elective		☐ summer s	emester		
			Academic year:	Intake 2021/2022 Catalogue numbe	r: FVM-V-JN D25			
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Module coordinator:			dr hab. Bartosz Pawliński, prof. SGGW Academic teachers of the Institute Of Veterinary Medicine; Department of Large Animal Diseases and Clinic and					
Teachers responsible for the module:		e	Laboratory of Veterinary Epidemiology and Economics; PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study					
Objectives of the module:			Program includes lectures and practical exercises from farm animal reproduction, surgery, internal and infectious diseases. During the course students gain knowledge and practical abilities from all four disciplines. Program of the course includes presentation and use of diagnostics and treatment methods of most common internal, surgical, infectious, reproductive tract diseases and disorders. The aim is to provide knowledge on the aetiology and pathogenesis of farm animal diseases requiring surgical, internal or obstetrical treatment, perform clinical diagnosis and examination and apply proper therapeutical procedures.					
Teaching forms, number of hours:		hours:	a) Lectures; 105 hours; b) Laboratory classes; 6 hours; c) Seminars; 45 hours; d) Clinical laboratories; 99 hours;					
Teaching methods:			Oral presentation with audio-visual techniques e.g. videos, 3D animated visualization or other multimedia presentations with practical training on isolated organs and phantoms, training in the diagnosis and therapy of diseases in slaughter-houses and clinics, flocks and studs, on University owned teaching mares, clinical patients and production animals. Part of the course is conducted with the use of multimedia techniques, e.g. computer programs, videos and computer presentations 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:		itial	Animal physiology modules 1-2, Animal anatomy modules 1-2, Histology and embryology modules 1-2, Veterinary pharmacology modules 1-2, Pathomorphology modules 1-2, Pharmacology, Clinical and laboratory diagnostics modules 1-2, General surgery and anesthesiology, Veterinary epidemiology, Parasitology and invasiology modules 1-2, Immunology, Biochemistry modules 1-2, Veterinary microbiology modules 1-2. Student should have holistic knowledge and ability to connect and extrapolate previously learned topics into coherent ideas regarding prevention, diagnosis, therapy and management of animal condition					
Learning effects			Course outcomes:		Learning outcomes relative to the course outcomes	Impact on the course outcomes*		
Knowled	lge:	1						
Skills	:	1	Learning outcomes are listed in the module descridiseases; Farm animal surgery; Farm animal reproduc	riptions of individual courses, i.e. Farm animal internal				
Competences: 1		1	anseases, raini annua surgery, raini annua reproduction, raini annua infectious diseases.					
Objectives of the module required to obtain learning effects:		equired	The course will provide knowledge and practical skills in regards to: Internal diseases, including disorders of excretory system, nervous system, cardiovascular system, respiratory system, alimentary system, skin problems, endocrinology and haematology. All topics will include following aspects: data collection and animal description, clinical examination, differential diagnostics, additional tests, diagnosis and therapy; General and specific surgery, including anaesthesiology, diagnostics of problems requiring surgical therapy approach, pre- and post-surgery management of animals; Etiopathogenesis, epidemiology, symptomatology, diagnostics, differential diagnostics, spread control and prevention of infectious diseases, including bacteria, virus and fungi based diseases; law-regulated diseases Farm animal reproduction The content of the lectures supplements the content of the laboratory classes. Detailed objectives of each individual course are described in module descriptions dedicated to this course.					
Assessment methods:			Practicals: oral/written, theory/practice tests from classes. Lectures: oral/written exam and practical exam In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.					
Detail description of assessment methods;		ment	Final grade is equal to the arithmetic mean of the grades gained from the exams of individual courses, i.e. Farm animal internal diseases; Farm animal surgery; Farm animal reproduction; Farm animal infectious diseases. It is mandatory to obtain a positive grade (minimum 3.0) from each individual exam.					

Formal documentation of learning	No extra assessment methods are anticipated.	
outcome:		
	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.	
	The condition of passing the course is no more than 20% of absences or in accordance with the current study regulations.	
Elements impelling final grade:	The final grade is issued on the basis of the average of grades for individual subjects (livestock internal diseases, livestock	
	surgery, livestock infectious diseases, livestock reproduction), with a minimum of each subject grade 3.0.	
Teaching base:	lectures - auditorium, auditory exercises - class room, laboratory exercises - departments labs and dispensaries, field	
reaching base.	exercises - RZD Obory or other farms of farm animals. Slaughterhouses.	

Mandatory and supportive materials:

Texthooks

- 1. Veterinary Reproduction and Obstetrics. D.E. Noakes, T.J. Parkinson, G.C.W. England 9th ed. Sauders, Elsevier, 2009
- 2. Large Animal Theriogenology. R.F. Youngquist, W.L. Threlfall. 2nd ed. Saunders, Elsevier. 2007
- 3. Biotechnologia rozrodu zwierząt udomowionych. A. Bielański i M. Tischner. Drukrol S.C., 1998
- 4. Pig diseases. D.J. Taylor, St Edmunsbury Press Ltd, Bury St Edmunds, Suffolk 2006
- 5. Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. OIE, 2008
- 6. Diseases of swine, 10th edition, John Wiley and Sons Inc. 2012, Ed. J.J. Zimmermann, L.A. Karriker, A. Ramirez, K.J. Schawrtz, G.W. Stevenson
- 7. Large animal internal medicine. Bradfort P. Smith, MOSBY St.Louis London Philadelphia Sydney Toronto, 2005.
- 8. Sheep and goat medicine. Pugh D.G, W.B. Saunders Company. Philadelphia, Pennsylvania, 2002.
- 9. Diseases of dairy cattle. Thomas J. Divers, Simon F. Peek, Saunders Elsevier. 2008.
- 10. Free radicals basics of cattle diseases. Kleczkowski M., Kluciński W., Bartosz G, WPALD and BWLSS. Lomza. 2006.
- 11. Handbook of Pig Medicine, Elsevier 2007, Jackson P., Cockcroft P
- 12. Infectious Diseases of Livestock, 2nd edition, Oxford University Press, Ed. J. A. W. Coetzer, R. C. Tustin

Journals:

Theriogenology, Animal Reproduction Science, Reproduction of Domestic Animals, Biology of Reproduction, Reproduction, Molecular Reproduction and Development, Reproductive Biology, Cloning, Archives of Andrology, International Journal of Andrology, Life Veterinary, Veterinary Medicine

Supplementary data sources:

- 1. www.oie.int
- 2. www.isid.org
- 3. www.pubmed.com

Relevant scientific publications, including those of the module coordinator.

ANNOTATIONS

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:			
Total ECTS points, accumulated by students during contact learning:	10ECTS		

^{* 3 –} complete and detailed, 2 – moderate, 1 – basic.