Module title:	Zoonoses			ECTS	1		
Polish translation:	Zoonozy						
Course:	Veterinary Medicine						
Module language:	English				Stage: JM	FVM	
Form of intramural studies: extramural	Type of ☐ basic ☐ mand module: ☐ directional ☐ electional		Semester: 8			winter seme	
<u> extramurar</u>		cademic year:	2023/2024	Catalogue		FVM-V-JMS	
		icademic year.	2023/2024	Catalogue	number.	D70_2	3
Module coordinator:	Prof. dr hab. Krzysztof Anusz						
	Academic teachers of the Institute of V	eterinary Me	dicine: Depar	tment of F	ood Hygiene	and Public	Health
Teachers responsible for the module:	Protection. PhD students in accordance field of study	-	-				
Unit responsible for the module:	IVM, , Department of Food Hygiene and	d Public Healt	h Protection				
Faculty in charge:	Faculty of Veterinary Medicine						
Objectives of the module:	The educational purpose is to prepare students to work as a public or private veterinary professional for the prevention of zoonoses, the source of which are the food of animal origin, food of a different origin, food-producing animals, companion animals. Students learn about the etiology, symptoms, clinical and laboratory diagnosis and the non-specific and specific prevention, as well as the methods of eradication and control of zoonoses (parasitic, viral, prion, bacterial, fungal, emerging - emerging zoonoses). Lectures include legal aspects of these issues and relate to the functioning of the public health system. Lecture topics: professional origin diseases (occupational diseases); legal acts regulating the control of zoonoses: epidemiological surveillance of zoonoses in EU(2h); definitions: direct zoonoses, cyclozoonoses, metazoonoses, saprozoonoses, "emerging zoonoses"(2h); zoonoses and transmission diseases; conditions of zoonoses occurrence(2h); food producing animals as a source of zoonoses); foodborne zoonoses (red meat and meat products, eggs and egg products, fish, shellfish, honey, byproducts of animal origin used for production of many products(2h); haemorrhagic fever and emerging zoonoses(2h); wildlife as a source of zoonoses(2h); pets and horses as a sources of zoonoses(2h); exotic animals as a source of zoonoses; current zoonotic threats (2h)						
Teaching forms, number of hours:	a) Lectures: 15 h						
Teaching methods:	Lectures are conducted with application of audiovisual means (original multimedia presentations, video Detailed schedule will be defined by the coordinator of the course at the beginning of semester. 1h/week consultations for students. Detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester.						
Formal prerequisites and initial requirements:	Pathomorphology modules 1-3, Animal pathophysiology, Veterinary microbiology modules 1-2, Parasitology and invasiology modules 1-2, Veterinary pharmacology modules 1-2, Veterinary epidemiology						
Learning outcomes:	Knowledge: K_1 Knows and understands biology of infectious agents inducing zoonoses, including mechanisms of disease transmission and organism defence systems K_2 Knows and understands causes and symptoms of zoonoses in animals and humans, patomorphological changes as a consequences of zoonoses in animals and humans, procedures of therapy and prevention in the particular zoonoses in animals and humans K_3 Knows and understands diagnostic (including differential diagnostics) and therapeutic procedures of zoonoses in animals and humans B.W.5 Knows and understands rules of clinical evaluation and animal health monitoring, taking into account suspicion of zoonosis K_4 Knows and understands appropriate law regulations, rules governing issuing of the verdicts and official oninions for the	implement rat conceptual an agent) therapy species zoono. S_2 Knows hor order to acqui on animal or g and their envir account aspec detection. S_3 Knows hor interdisciplina the problem o regarding cool and sanitary ir S_4 Knows hor interpret respiveterinary surjowner, society taking into accept species and society taking into accept species are species and society taking into accept species are species and society taking into accept species are species and species are species and species are species and species are species are species and species are spec	w to plan anam re precise infor group of animal ronment, taking ts of zoonoses w to plan activi ry team, in rela of zoonoses, esp peration with	d conotic get animal suresis in mation s (heard), g into ty in the action to opecially doctors tely emimal, its ent, of	Competences C_1 Is prepare responsibility concerning hu environment C_1 Is prepare sources of infections on emerging a zoonoses, with on emerging a zoonoses C_3 Is prepare update knowled professional dC_4 Is prepare with co-worke knowledge in eradication C_5 Is prepare specialists of the protection	d to take for his decisi mans, animal d to utilise up mation about particular end re-emerged to constantedge and skill evelopment d to communicate field of a d to collabor he other pro	als and anbiased out emphasis ting atly als for nicate the coonoses ate with fessions

Elements impelling final grade:	Final grade : 100% written final credit			
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Formal documentation of learning outcomes:	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.			
Assessment methods:	practice Credit for a grade – 1 written credit covering the content of lectures, formula of 5 open questions (5 points for the question). To pass the course it is necessary to get at least 60% of the total number of points. I and II dates are in the same form. Grading scale: 60-67% - satisfactory (3.0) 68-75% - satisfactory plus (3.5) 76-83% - good (4.0) 84-92% - good plus (4.5) 93-100% - very good (5.0) In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.			
	law courts, state, local and veterinary administrations in relation to zoonoses K_5 Knows and understand conditions for appropriate utilisation and disposal of animal by-products and management of waste from animal production, that are possible sources of zoonoses K_6 Knows and understands functioning of the State Veterinary Service and State Sanitary Inspection, also in the aspects of the control and eradication of zoonoses K_7 Knows and understands rules of consumers health protection by the appropriate organ responsible for the production of foods of animal origin K_8 Knows and understands occupational health and safety regulations in veterinary	S_5 Knows how to choose for professional advice and help proper specialists or specialised units in difficult cases, taking into account zoonoses S_6 Knows how to analyse the accuracy of epizootic procedures in cases of the law-regulated diseases, taking into account zoonoses S_7 Knows how to plan epizootic and epidemiologic investigation in suspicious cases to be zoonoses		

Mandatory and supportive materials :

- 1. 1. Handbook of Zoonoses. Identification and prevention. J.L. Colville, D.L. Berryhill, Mosby Elsevier, 2007.
- 2. Zoonoses: Infectious Diseases Transmissible from animals to humans. Editors: H. Krauss, H.G. Scheffer, W. Slenczka, A. Weber, H. Zohner. American Society for Microbiology, III Edition, 2003.
- 3. Zoonoses Infections Affecting Humans and Animals. Focus on Public Health Aspects. Editor: Sing A. Springer, 2015.
- 4. Human Infectiouse Diseases Through the Lens of Social Ecology. F. Keesing, R.S. Ostfeld, Springer New York, 2008.
- 5. Human-Animal Medicine. Clinical Approaches to Zoonoses, Toxicants and Other Shared Health Risks. Ed.: P. M. Rabinowitz, L. A. Conti, Saunders, 2010.
- 6. Veterinary Parasitology Fourth Edition. Ed.: M. A. Taylor, R. L. Coop, R. L. Wall, WILEY Blackwell, 2016.
- 7. Meat Hygiene. J.F. Gracey, D.S. Collins, R. J. Huey, Elsevier Health Sciences, 1999.
- 8. Integrated Food Safety and Veterinary Public Health. S. Buncic, CABI, 2006.

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:	25 h
Total ECTS points, accumulated by students during contact learning:	1 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject:

Outcome category	Learning outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*)
Knowledge – K_1	Knows and understands biology of infectious agents inducing zoonoses, including mechanisms of disease transmission and organism defence systems	A.W.13	3
Knowledge – K_2	Knows and understands causes and symptoms of zoonoses in animals and humans, patomorphological changes as a consequences of zoonoses in animals and humans, procedures of therapy and prevention in the particular zoonoses in animals and humans	B.W.3	3
K_3	Knows and understands diagnostic (including differential diagnostics) and therapeutic procedures of zoonoses in animals and humans	B.W.4	3

K_4	Knows and understands rules of clinical evaluation and animal health monitoring, taking into account suspicion of zoonosis	B.W.5	2
K_5	Knows and understands appropriate law regulations, rules governing issuing of the verdicts and official opinions for the law courts, state, local and veterinary administrations in relation to zoonoses	B.W.7	2
K_6	Knows and understand conditions for appropriate utilisation and disposal of animal by-products and management of waste from animal production, that are possible sources of zoonoses	B.W.15	2
K_7	Knows and understands functioning of the State Veterinary Service and State Sanitary Inspection, also in the aspects of the control and eradication of zoonoses	B.W.16	3
K_8	Knows and understands rules of consumers health protection by the appropriate organ responsible for the production of foods of animal origin	B.W.17	2
K_9	Knows and understands occupational health and safety regulations in veterinary practice	C.W.3	3
Skills – S_1	Knows how to select and implement rational, direct and conceptual antimicrobial (zoonotic agent) therapy regarding target animal species	A.U11	2
S_2	Knows how to plan anamnesis in order to acquire precise information on animal or group of animals (heard), and their environment, taking into account aspects of zoonoses detection.	B.U.2	3
S_3	Knows how to plan activity in the interdisciplinary team , in relation to the problem of zoonoses, especially regarding cooperation with medical doctors and sanitary inspectors	A.U15	2
S_4	Knows how to appropriately interpret responsibility of the veterinary surgeon towards animal, its owner, society and environment, taking into account problem of zoonoses in animals and humans	A.U.16	3
S_5	Knows how to choose for professional advice and help proper specialists or specialised units in difficult cases, taking into account zoonoses	A.U23	2
S_6	Knows how to analyse the accuracy of epizootic procedures in case of the law-regulated diseases, taking into account zoonoses	B.U.8	2
S_7	Knows how to plan epizootic and epidemiologic investigation in suspicious cases to be zoonoses	B.U.19	2
Competences – C_1	Is prepared to take responsibility for his decisions concerning humans, animals and environment	K.S.1	3
Competences – C_2	Is prepared to utilise unbiased sources of information about zoonoses, with particular emphasis on emerging and re-emerging zoonoses	K.S.4	3
C_3	Is prepared to constantly update knowledge and skills for professional development	K.S.8	3
C_4	Is prepared to communicate with co-workers and share the knowledge in the field of zoonoses eradication	K.S.9	3
C_5	Is prepared to collaborate with specialists of the other professions for the protection of public health	K.S.11	3
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