

Code of subject	M_WE_SEM8 PW 1F/2F MYKOL
Field of study	Veterinary medicine
Name of the training module including the Polish name	Veterinary mycology Mykologia weterynaryjna
Language of instruction	English
Type of the training module	elective
Level of the training module	Master level
Form of studies	Stationary
Location in the programme (year)	IV
Location in the programme (semester)	VIII
Number of ECTS credits with a division into contact/noncontact	1 (0,73/0,27)
Name and surname of the person in charge	Aneta Nowakiewicz dr hab.
Unit offering the subject	Sub-Department of Veterinary Microbiology
Aim of the module	The aim of the module is to familiarize the student with the knowledge and practical aspects of veterinary mycological diagnostics, both clinical and laboratory, as well as the type, course and therapy of diseases in animals caused by dermatophytes, filamentous fungi and yeast-like fungi.
Learning outcomes	<p>Knowledge:</p> <p>K1. Knows the biology of the main ethological factors causing fungal diseases in animals in terms of their use in laboratory and clinical diagnostics.</p> <p>K2. Knows the principles of conducting a clinical examination, in-depth analysis (assessment) of clinical symptoms, making a diagnosis including differential diagnosis, taking therapeutic and / or prophylactic measures</p> <p>Skills:</p> <p>S1. Student can describe the etiological factors of fungal diseases in animals and use this knowledge in taking appropriate actions</p> <p>S2 Is able to select and apply appropriate laboratory techniques and perform diagnostic procedures, properly and safely handle infectious material as well as analyze and interpret the results of these tests in order to identify the etiological factors of fungal diseases</p> <p>S3. Student can take an interview, conduct a clinical examination for the diagnosis of mycoses</p> <p>S4. is able to take therapeutic and prophylactic measures to combat mycoses in animals</p> <p>Social competences:</p> <p>S1. Can cooperate and work in a group, has a sense of responsibility for other team members</p> <p>S2. Is aware of the importance of social and professional responsibility for the tasks performed in the aspect of animal health and the protection of public health.</p>

	S3. Is aware of his own limitations, in the era of rapidly emerging new diagnostic techniques and therapeutic methods, understands the need for constant training and deepening knowledge of the module issues
Preliminary and additional requirements	-
Contents of the training module – a compact description of approx. 100 words.	<p>Content of lab classes:</p> <p>Fungi as pathogens - division, classification, nomenclature of mycoses.</p> <p>Material for mycological diagnostics - selection, rules of collection and transport, initial preparation</p> <p>Dermatophytosis of companion animals - etiological factors and their classification, laboratory morphological and phenotypic diagnostics, methods of isolation of fungal DNA, selection of genetic markers for identification, epidemiological investigation in molecular terms, interpretation of genomic analysis results.</p> <p>Dermatophytosis of farm animals, horses and birds - etiological factors, macro- and micromorphological description, application of the hair perforation test in diagnosis</p> <p>Companion animal dermatophytosis- clinical symptoms, principles of diagnosis, treatment and prevention</p> <p>Livestock dermatophytosis - clinical symptoms, principles of diagnosis, treatment and prevention - classes in a diagnostic laboratory, work with patients and clinical material</p> <p>Candidiasis and cryptococcosis in animals - etiological factors, laboratory diagnostics (phenotypic and genomic)</p> <p><i>Malassezia</i> infections in companion animals - pathogenic species, growth requirements, phenotypic diagnostics, molecular markers of identification and their application in diagnostics</p> <p>Malasseziosis- diagnostic and therapeutic approach- laboratory classes, work with clinical material</p> <p>Aspergillosis and other opportunistic mycoses in animals - diagnosis based on the direct preparation, phenotypic testing</p> <p>Opportunistic mycoses - diagnosis, treatment and prevention</p> <p>Mastitis mycotica - (<i>Candida</i>, <i>Geotrichum</i>), mammary gland prototecosis: the most common etiological factors</p> <p>Mastitis mycotica - clinical, laboratory and differential diagnosis, treatment - laboratory classes, work with clinical material</p> <p>Mycoses of tropical origin - histoplasmosis, blastomycosis, coccidioidiomycosis, trichosporonosis, (laboratory diagnostics and sources of infection, endemic regions of occurrence)</p> <p>Mycograms - selection of drugs, rules and execution of tests, interpretation of results</p>
Recommended and obligatory reading list	<p>Scott D.W. Farm animal dermatology. Color atlas. Second ed. Wiley Blackwell. 2018</p> <p>Scott D.W, Miller W.H., Griffin C.E., Muller and Kirk's small animal dermatology. 6th ed. WB Saunders Comp. 2011</p>
The intended forms/activities/ teaching methods	discussion, independent project of the diagnostic procedure

Methods of verification and documentation forms of the achieved learning outcomes	<p>K –pass the module is based on a positive result obtained in the thematic test: answer to 4 open-ended questions at a minimum level of 61%</p> <p>- oral response during each exercise</p> <p>S - assessment of self-conducted laboratory procedures and experiments by the teacher,</p> <p>S - participation in the discussion, answer to the questions at the beginning of each laboratory class, written tests.</p> <p>The grading scale is in line with FBQC</p>		
Balance of ECTS credits	CONTACT		
		<i>Godziny</i>	<i>ECTS</i>
	Lab classes	15	0,6
	consultations	1	0,03
	Grade	3	0,1
	Total	18	0,73
	NON CONTACT		
	Preparation for lab classes	3	0,1
	Preparation for passing	5	0,17
	Total	8	0,27
Number of contact hours	Lab classes	15	0,6
	consultations	1	0,03
	Grade	3	0,1
	Total	18	0,73
Relationship between subject learning outcomes and veterinary studies learning outcomes	<p>W1-WE_W8+++, W2-WE_W10++, WE_W18++, WE_W19++ U1-WE_U19+ U2- WE_U19++ U3- WE_U14+, WE_U19++, WE_U21++ U4- WE_U5+ K1-WE_K11++ K2-WE_K1++ K3-WE_K6++, WE_K13++</p>		
Impact of selected compounds to final grade	<p>The number of absences cannot exceed 2 hours. Final grade: 80% final pass grade, 20% grade for active participation in classes.</p>		