Module title:	Veterinary virology	ECTS	1
Polish translation:	Wirusologia weterynaryjna		
Course:	**Veterinary Medicine**		

Module language: English		Stage: JM-FVM	
Form of studies: ■ intramural ☐ extramural	Type of module: ☐ basic ■ directional ☐ mandatory ■ elective	Semester: 5	■ winter semester ☐ summer semester
Academic year:	**2023/2024**	Catalogue number:	FVM-V-JMSS-05W-ED01_23

Module coordinator:	**Prof. dr hab. Marcin Bańbura**
Teachers responsible for the module:	**Prof. dr hab. Marcin Bańbura, Academic teachers of the Institute of Veterinary Medicine; Department of Pathology and Veterinary Diagnostics; PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study**
Unit responsible for the module:	**IVM, Department of Preclinical Sciences**
Faculty in charge:	**Faculty of Veterinary Medicine**
Objectives of the module:	Providing information on the most important animal viruses, especially pathogenic for farm animals, their basic characteristics, properties, tropism, pathogenicity and virulence as well as potential threats to humans. The program also included diseases caused by these viruses, the most important clinical signs of infection and anatomopathological changes, as well as strategies for preventing infections. 1. Pathogenesis of viral infection - Virus tropism and clinical manifestation of the disease. Basic properties of major animal viruses, including host range, virulence and clinical and anatomopathological signs of infection Adenoviruses: CaDV-1, 2-CaDV African swine fever virus Smallpox viruses: goat pox sheep, bovine disease - 2 hours 2. Herpesviruses: EHV-1, 4, canine, herpes virus, Newcastle disease virus, IBR-IPV, Marek's disease virus Papilloma viruses and polyomaviruses Parvoviruses in dogs and pigs Cirovirus in pigs and birds - 2 hours 3. Caliciviruses: swine vesicular rash viruses, feline calicivirus, RHDV Picornaviruses: SVDV, Talfan disease virus, encephalitis virus, FMDV, Coronaviruses: ILTV in chickens, TGEV, feline peritonitis virus Arteriviruses: equine arteritis virus, PRRS virus - 2 hours 4. Flaviviruses: swine fever virus, BVD-MD virus, equine encephalitis virus, Ebola virus, Paramyxoviruses: Newcastle disease virus, rinderpest virus, small ruminant virus, nasal virus in dogs and fur animals, Rhabdoviruses: rabies and vesicular stomatitis virus - 2 h 5. Influenza viruses, including highly pathogenic avian influenza; Rift Valley Fever Virus, Gumboro disease virus Reoviruses: African horse sickness virus, bluetongue virus - 2 hours 6. Retroviruses: sheep lung adenomatosis virus, Maedi-Visna virus, goat arthritis virus, equine infectious anemia virus, bovine leukemia virus - 2 hours 7. Viral zoonoses Virology - a historical outline, from the days of Jenner to the present day - 3 hours
Teaching forms, number of hours:	a) Lectures; hours 15
Teaching methods:	Lecture – Original multimedia presentation prepared by academic teachers and discussion; 1h / week consultations 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:	Veterinary microbiology

Learning outcomes:	Knowledge:	Skills:	Competences:
	Student knows: - differences in the pathogenesis of viral and bacterial infections - the most important viruses that infect animals and their basic properties Student understands - the role of viral infections in animal production	Student: - selects the appropriate procedure to be followed in the event of notifiable diseases being declared - explains the importance of viruses for animal health and welfare	Student: - Is ready to take appropriate action in the event of notifiable diseases - is ready to cooperate and consult other people and share his knowledge with others. - is ready to use his knowledge and skills in further stages of education

Assessment methods:	The student does not have to meet special conditions to proceed with the credit; final credit covering all content of education sem. 5 The final test covering all content of the subject is carried out as a written test with 6 descriptive questions, 2 points/question, max. number of points 12, score according to the scale: 11-12 very good 10 a good plus 9 good 8 sufficient plus 7 sufficient = <6 insufficient at the university Two crediting deadlines are foreseen in the same form.

	No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.
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.
Elements impelling final grade:	**The results of students' written work constitute 100% of the final grade in the subject. The final grade is equal to the arithmetic average calculated from the grades obtained from both deadlines:** **2 + 4 average 3** **2 + 5 average 4** **or a positive grade at the "satisfactory" level obtained after passing the retake test**
Teaching base:	Lecture hall at the Institute of Veterinary Medicine
Mandatory and supportive materials : There are many reference books that may be helpful as supplemental material to lectures and laboratory exercises. A wide variety of general, applied health and health profession microbiology textbooks are available in the Faculty and University libraries. Various veterinary medical textbooks have large sections devoted to infectious diseases. Within these discussions, disease, ecology, pathogenic mechanisms and other characteristics of agents are frequently reviewed. The following microbiology textbooks are suggested for further reading: 1. Murphy et al. Veterinary virology. 3rd edition. Academic Press, San Diego, London, Boston, New York, Sydney, Tokyo, Toronto 2. Scientific publications in the field of taught topics and research performed in the responsible unitRelevant 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 each of course outcomes*)
Knowledge -	differences in the pathogenesis of viral and bacterial infections the role of viral infections in animal production knowledge of the most important viruses that infect animals and their basic properties	AW.13	3
Skills -	selects the appropriate procedure to be followed in the event of notifiable diseases being declared	B.U.8	3
Competences -	Explains the importance of viruses for animal health and welfare, and animal production	K.S.9	3