

Syllabus

Module title:	Veterinary Prevention	ECTS	4
Polish translation:	Prewencja weterynaryjna		
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 checked="" type="checkbox"/> directional	<input checked="" 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-D62_20

Module coordinator:	Prof. Romuald Zabielski Dr Sc.;			
Teachers responsible for the module:	Academic teachers of Center for Translational Medicine (CMT), PhD students, visiting professors and other specialists in the field of study.			
Assumptions, Goals, and Course Description	Veterinary prevention (VP) covers all decisions and actions to prevent disease by optimal housing and sanitary conditions and keep welfare of animals. It applies to all activities aimed at preventing occurrence of diseases before development in animals rather than on their diagnosis, treatment or elimination of disease symptoms. The activities concern not so much the health of individual animal, but for all herd. Veterinary prevention is an interdisciplinary subject combining knowledge in the field of physiology, nutrition and zoohygiene, as well as immunology, microbiology but also internal and infectious diseases, reproduction, management and economics.			
Teaching forms, number of hours:	a) Lectures; hours 30; b) Laboratory classes; hours 18; c) Clinical laboratories; hours 27;			
Teaching methods:	Monography lectures supported by multimedia presentations are given by experts in the field. Practical course includes discussion on preparations for visiting livestock farm, collecting and analyzing data, reporting strong and weak points found in farm management and building cost-effective strategies which could be proposed to solve farmer's problem - students' own work in groups chosen by them. 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:	Passed exams in Agronomy, Environmental protection, Biostatistics and documentation methods, Animal husbandry and technologies, Animal production technologies, Veterinary epidemiology, Animal nutrition and feed science, Immunology, Parasitology and invasiology, Pharmacology, Feed hygiene, Pathomorphology, Large Animal diseases Student has knowledge and skills from these subjects.			
Learning effects	Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*	
Knowledge:	1	Student knows methods of animal houses microclimate analyses.	B.W.5, B.W.9, B.W.11, B.W.20	3
	2	Student knows principles of disinfection, desinsection, deratization and repelling synantropic birds.	B.W.8, B.W.17, B.W.20	3
Skills:	1	Student has ability to evaluation of the farm (environmental and zoohygienic conditions, work organization, services, evaluation of feeding and immunoprophylactic strategy.	B.U.2, B.U.7, B.U.16, B.U.20	2
	2	Student can perform evaluation of farm productivity including evaluation of the strategy taken by the farm management and current market situation.	B.U.5, B.U.8, B.U.20, B.U.25	2
	3	Student propose reasonable prevention strategies for evaluated farms.	B.U19, B.U24, B.U25	2
Competences:	1	Student is able to monitor the implemented preventive actions at farm.	B.U.19, B.U.24, B.U.25	3
	2	Student achieves the ability to use principles of veterinary prevention in the herd.	KS.1, KS.2, KS.3, KS.7	2
	3	Student shows the abilities to cooperate with farmer in solving health problems in the animal's herd.	KS.1, KS.11, KS.2, KS.6, KS.9	3
Objectives of the module required to obtain learning effects:	The content of lectures is a supplement to the content of exercises. <u>Monographic lectures:</u> Introduction to veterinary prevention: definition, goals, methods of activity in VP; Environmental conditions (climate, water, air, buildings and farm equipment, microclimate of rooms, dusts, odors); Biosecurity rules in pig and dairy cattle farms; SPIWET form and VP principles in animal trade, review of EU and national legal regulations important in herd health management; waste utilization, regulations, methods of utilization; VP in newborns, strategies for rearing piglets and calves; Feed additives in the prevention of infectious and metabolic diseases; VP in wild animals in national			

	<p>parks, in aquaculture and in the ZOOs ; Veterinary prevention of companion animals and horses. Prevention in apiaries. PW in the context of human health; Current issues in veterinary prevention.</p> <p><u>Laboratory exercises:</u> Parameters for assessing the quality of zoohygienic conditions, preparing to farm assessment (data collection, material collection, ability to read data). Preventive programs - pigs, cattle and horses.</p> <p><u>Clinical exercises:</u> Data collection for farm assessment (errors and positive aspects in the context of the biosecurity, welfare and other aspects of veterinary prevention, measurements of microclimate parameters, sampling for microbiological or toxicological tests, samples for feed assessment); Feed assessment in the context in prevention of diseases in animals. Animal welfare control according to EU and local regulation. Preparation of the report from farm, presentation of the report and discussion .</p>
Assessment methods:	<p>Written tests, Written exam, Project</p> <p>In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.</p>
<p>Detail description of assessment methods;</p> <p>Formal documentation of learning outcome:</p>	<p>Preparation for the topic of classes and active participation are assessed. In the beginning of all classes, a test may be conducted to check the student's preparation for the topic of the classes. The results from these tests may be included in the final grade of the course.</p> <p>Evaluation of farm report (student's project) is based on compliance of the content with the given topic, correct conclusions, formulating rational solutions, conducting discussions and answering questions.</p> <p>Written exam in the form of a mixed test (open questions, completion test and single/multiple choice questions). The exam covers all topics from lectures and classes. Minimum 51% of the points is needed to pass the subject. In due to extraordinary situation, distance learning and other methods of verifying the learning outcomes might be allowed.</p> <p>Submitted report of farm evaluation, written exam. Record in eHMS system, presence lists, database of oral and written questions.</p>
Elements impelling final grade:	<p>The final grade in the course is influenced by the following elements:</p> <ul style="list-style-type: none"> - preparation for classes and active participation in classes - assessment of the farm report - final exam
Teaching base:	Lecture halls, classrooms, laboratories, farms
<p>Mandatory and supportive materials :</p> <ol style="list-style-type: none"> 1. "Dairy Herd Health", Green M., CABI Publishing, Oxfordshire 2012 (related chapters) 2. "Pig Health" Carr J. CRC Press, NY 2018 (related chapters) 3. "Animal Health" Jackson NS. Interstate Publishers INC (related chapters) 4. "Pigs welfare and practice." I Camerlink. 5M Publishing. 5. "Agricultural Medicine: Rural Occupational and Environmental Health, Safety, and Prevention" Kelley J. Donham, Anders Thelin. Wiley-Blackwell ,2016, 2nd Edition. 6. "Veterinary Infection Prevention and Control" L Caveney, B Jones, K Ellis, John Wiley and Sons, 2012 7. "Aquaculture Biosecurity: Prevention, Control, and Eradication of Aquatic Animal Disease" D Scarfe, Ch-Sh Lee, PJ. O'Bryen. Blackwell Publishing, 2006 8. "Handbook of Calf Health and Management: A Guide to Best Practice Care for Calves" S Mahendran, 5M Publishing, 2021 <p>Relevant scientific publications including those of the module coordinator.</p>	
<p>ADNOTATIONS</p> <p>Disposable protective clothing and individual protective equipment in accordance with accepted bio-assurance principles are mandatory in laboratory and project classes.</p>	

* 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:	3 ECTS