Module code	M_WE_SEM9 PREW 1 2019-20
Field of study	Veterinary medicine
Module name, also the name in English	Veterinary Prevention 1
	Prewencja weterynaryjna 1
Language of instruction	English
Module type	obligatory
Level of studies	Long-cycle master's degree studies
Form of study	Full-time
Year of study in the field of study	V
Semester of study in the field of study	IX
ECTS credits, divided into contact/non-contact hours	2 (1/1)
Academic title/degree, name of the person responsible for the module	Prof. dr hab. Renata Urban-Chmiel
Unit teaching the module	Department of Veterinary Prevention and Avian Diseases
Module objective	Acquire knowledge and skills to: evaluate the health of animal populations diverse in species and production based on epidemiological and production indicators; evaluate the importance of environmental factors in health management , including the ability to identify and eliminate factors harmful to animals; plan and conduct activities to fight threats and improve herd health and performance;
The learning outcomes for the module include a description of the knowledge, skills and social competences that the student will gain after completing the module.	Knowledge:
	K1. The student has a basic knowledge of the elementary conceptual categories and terminology used in veterinary prevention.
	K2. The student has knowledge of the influence of environmental factors, animal housing conditions and systems as well as species predispositions on the health status and production capacity.
	Skills:
	S1. The student has the ability to find, understand, analyze and creatively use necessary information from various sources and in different forms appropriate for veterinary prevention.
	S2. The student interprets law regulations regarding the basic principles of biosecurity in herd prevention.
	S3. The student has the ability to evaluate microclimate using measurement techniques of its evaluation components of the farms in terms of environmental and zoohygienic conditions, work organization and service and skilfully uses these data in preventive actions for the herd.
	Social competences:
	C1. The student is able to interact and work with representatives of different professions (breeder, zootechnician) while taking different roles regarding the evaluation of parameters, animal welfare conditions and effects on health and production status of animals.

	C2. The student is aware of the need for targeted further training and self-improvement in his/her profession, especially in the development of modern preventive measures.
Prerequisites and additional requirements	Sequence of subjects
Module program content	**Lectures** Main causes of economic losses in different animal production sectors. Characteristic of stressful environmental factors with their effects on the health, immune status and farm animals production. Characteristic of endogenous factors predisposing immunosuppression in calves. Evaluation of effects of the metabolic disorders in cows on the immune status and health of newborn calves. Principles of developing prevention programs for selected companion animal species. Characteristics of alternative methods to chemotherapeutics to prevent diarrhea in calves. Basic biosecurity principles in the use of vaccines in animals. Vaccinology-general characteristics. **Practical classes** Characteristic of farm animals environment as animals health risk factors. Characteristic of the effects of exemplary feeding systems in cattle and pigs on health status and production. Characteristic of basic components of microclimate in rooms (temperature, humidity, air movement, dustiness, microflora) in terms of influence on health status, immunological parameters and farm animals production. Methods of measuring basic components of microclimate with the use of measuring instruments and interpretation of the results obtained on the basis of zoohygienic standards for different species and categories of animals - practical classes. Influence of animal housing environment on disease emergence;
List of core and supplementary literature	**Required literature** : 1. Philpot W.N, Nickerson S.C., Malinowski E. Winning the Fight Against Mastitis. Westfalia Polska 2.Cockcroft P. Bovine medicine. Wiley Blackwell, 2015. 3.Matthews J. Diseases of the goat. Third Ed. WIley-Blackwell, 2009 4 Radostits O.M., Herd Health Saunders Company, 2001. Current Veterinary Therapy sections, 2011-2015. 5 Greenough P.R. Lameness in cattle 2007 Elsevier . 6. Scientific articles and law regulations

Planned forms/activities/teaching methods	As a part of the courses, students have the opportunity to participate in classes conducted in the form of lectures and seminars. In addition, some issues are implemented manually in the form of group work (use of instruments for measuring the components of microclimate, participation in the preparation of a sample feed mixture).
Verification methods and ways of documenting the achieved learning outcomes.	Verification of knowledge and skills effects 01, 02, 03 through oral answer and written test in IXth semester in the form of 4 essay questions of equal significance of 25% each. Verification of achieved effects 03 consists also in: manual acquisition of the ability to use instruments to measure the components of microclimate and interpret obtained results with standards. Verification of competency (01-02) based on class participation and semester credit. Scale of grades: 0 - 50% - unsatisfactory 51 - 60% - sufficient 61 - 69% - sufficient plus 70 - 80% - good 81 - 90% - good plus 91 - 100% - very good The pass mark of IXth semester is at least a satisfactory grade from the final written exam at the end of the semester.

ECTS credits	Form of course ECTS credits	Number of hours
		Contact hours
	Lectures 0.5	15
	Recitation classes 0,5 and laboratories	15
	Consultations related 0,05 to preparation for test and exam	2
	Final credit 0,05	1
		Number of hours **Non-contact hours**
	Preparation for 0,2 laboratory classes	7
	Preparation for 0,2 recitation classes	7
	Preparation for 0,4 tests and exams	13
	Reading literature 0.1	4
	TOTAL: **2**	**64**
The workload of activities that requires direct participation of an academic teacher	Participation in lectures - 15 hours, in classes - 15 hours, consultations - 2 hours; semester credit - 1 hour	
Relation of module learning outcomes to course learning outcomes.	Module learning outcome code - course learning outcome code K1. - WE_W21+, WE_W27 + K2.- WE_W21+, WE_W27++ S1.- WE_U15 ++, S2.- WE_U31+, WE_U15 ++, S3.- WE_U31+, WE_U15 +, S4.- WE_U31++, WE_U15 +++, C1.- WE_K 5 +, WE_K 6 ++, WE_K 9 + C2.- WE_K 5 +, WE_K 6 ++, WE_K 9 +	
Elements and values affecting the final grade	The final grade is based on the written exam in IX semester in the form of 4 essay questions of equal significance of 25% each- Total -100%.	