Module code	M_WE_SEM9 PW 1G/2G NEURO KLIN
Field of study	Veterinary medicine
Module name, also the name in English	Clinical neurology and neurosurgery
	Neurologia kliniczna i neurochirurgia
Language of instruction	English
Module type	elective
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	Total 1 (0,6/0,4)
Academic title/degree, name of the person responsible for the module	Dr hab. n. wet. Tomasz Szponder
Unit teaching the module	Department of Animal Surgery
Module objective	The aim of the module is to familiarize the student with the basic principles of diagnosis and management of neurological deficits. To acquire the ability to link neurological symptoms to homeostatic and metabolic disorders. To familiarize with basic diagnostic procedures and neurosurgical procedures in veterinary medicine.
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 knows diseases occurring in animals connected with the nervous system
	K2 demonstrates knowledge of basic neurological examination methods
	K3 knows and understands the handling of clinical data obtained from the clinical and neurological examination and the results of laboratory and additional tests
	Skills:
	S1 independently performs clinical and neurological examination of animals
	S2 interprets the result of a neurological examination under the guidance of a supervisor
	S3 has the ability to take standard actions, using appropriate diagnostic methods and techniques to accurately diagnose nervous system disease
	S4 has the ability to select appropriate treatment under the guidance of a supervisor, is familiar with basic surgical techniques in animal neurosurgery
	Social competences:
	C1 is able to analyze clinical cases in neurology together with colleagues, sharing own experience
	C2 is aware of the importance of social, professional and ethical responsibility for the health of animals with neurological deficits
	C3 understands the need to deepen knowledge related to neurological disorders in dogs and cats
	C4 can provide assistance to animals with neurological deficits under stressful conditions

Prerequisites and additional requirements	
Module program content	1. Neurological examination of dogs and cats - 2 hrs. 2. Practical approach to epilepsy in the dog and cat - 2 hrs. 3. Clinical case analysis in selected nervous system disorders - 3 hrs. 4. Basic surgical procedures in veterinary neurosurgery - 3 hrs. 5. Surgical treatment of cervical spine diseases in small animals - 2 hrs. 6. Surgical treatment of thoracolumbar and sacral diseases in small animals - 2 hrs. 7. Credit - 1 hr.
List of core and supplementary literature	1. Lorenz M.D., Kornegay J.N „Veterinary neurology" 2. A. Jaggy „Atlas and manual for neurology of small animals" 3. C. Chrisman, C. Mariani, S. Platt, R. Clemmons „NEUROLOGY of small animals for practising veterinarians " 4. Veterinary journals available
Planned forms/activities/teaching methods	Multimedia presentations, demonstrations of specialised equipment, practical classes, discussion of cases, self-study
Verification methods and ways of documenting the achieved learning outcomes.	Verification of the achieved learning outcomes is obtained through evaluation of student activity during the classes (active - plus "+", inactivity - minus "-"). A student should earn at least seven plus points (7 "+") to receive credit for the module. In the practical part, in which students independently perform a neurological examination of a dog or cat, analyze clinical cases (provided by the instructor) and select appropriate treatment methods (conservative or surgical), participate in surgical procedures, etc. A student should earn at least seven plus points (7 "+") to receive credit for this module. The final credit for a module is a sum of plus ('+') points of at least 15. In addition, attendance at at least 85% of the exercises in the module plan is required to pass the course. The written final assessment consists of 25-30 single-choice test questions. Questions relate to material presented in class. A student is required to earn a minimum of 61% of the total possible points for the final exam to receive a passing grade. The criteria used in the final evaluation are consistent with the Book of Education Quality

ECTS credits	Form of classes	Number of contact hours	ECTS credits
	Auditing exercises	**4**	0.16
	Laboratory classes	10	0.4
	Credit	1	0.04
		15 hrs.	**0.6**
		Number of non-contact hours	
	Preparation for laboratory classes	**5**	0.2
	Preparation for examination	5	0.2
	Literature studying	10 hrs.	0.4
	Total	**25 hrs.**	**1**

The workload of activities that requires direct participation of an academic teacher	4 hrs. Recitation classes 10 hrs. laboratory classes consultations 1 hour credit Total 0,6 ECTS
Relation of module learning outcomes to course learning outcomes.	K1--- B.W3.+++ K2---B.W5.++ K3---B.W6. ++ S1--- B.U3.+++ S2--- B.U7.+++ S3---B.U7.++ B.U13++ S4---B.U13.+++ C1---C.W3.++ C2---C.U2.++ C1---K9)++ C2---K1)+++ K2)++ C3---K8)++ C4---K10)++
Elements and values affecting the final grade	Final grade: - class attendance - weighting of 5% - active student participation in classes - weighting of 10% - practical management of an animal with neurological deficits - weighting of 20% - grade in test credit pass - weighting of 65%