Module code	MWESEM11PW1J/2J MZ RADIO
Field of study	Veterinary medicine
Module name	Emergency radiology in small animal practice Radiologia kliniczna nagłych przypadków u małych zwierząt
Language of instruction	English
Module type	elective
Level of studies	Long-cycle Master's Degree studies
Mode 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	1 (0.57/0.43)
Academic title/degree, name of the person responsible for the module	Dr. n. vet. Renata Komsta
Unit teaching the module	Laboratory of Radiology and Ultrasonography
Module objective	The aim of this module is to master the theoretical knowledge and practical skills in clinical emergency radiology in small animals, enabling to provide clinical practice and veterinary services according to current standards. To develop a duty of continuous self-education, broadening and deepening theoretical and practical skills in diagnostic imaging of clinical emergencies.
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. has acquired the knowledge needed to evaluate emergency x-ray results in small animals
	Skills:
	S1 has the ability to correctly interpret the results of radiological examinations, formulate diagnoses in emergency cases in small animals
	S2 is able to prepare clear descriptions of cases and maintain records, in accordance with applicable regulations, in a form that is understandable to the animal owner and readable by other veterinarians
	Social competences:
	Sc1 shows independence in action, can formulate own opinions, accepts responsibility for decisions, is aware of their consequences, especially those affecting human and animal health in clinical emergencies
	Sc2 is able to set priorities for the implementation of tasks, correctly identifies and resolves dilemmas associated with the profession, behaves in accordance with the principles of ethics and veterinary deontology in urgent clinical situations
	Sc3 is aware of his own limitations, understands the need for constant education and self-improvement in diagnostic imaging of emergency clinical conditions in small animals
Prerequisites and additional requirements	according to the sequence of subjects

Module programme content	Basic principles of radiological examination of small animals in clinical emergencies. Selecting the right imaging method. The trauma patient - basic principles of diagnostic imaging of the thorax and abdomen and the axial portion of the skeleton. Acute abdominal syndrome in radiographic examinations.
List of core and supplementary literature	1. J. Kevin Kealy Hester McAllister John Graham „Diagnostic Radiology and Ultrasonography of the Dog and Cat", Saunders 2010. 2. Mannion P., Diagnostic ultrasound in Small Animal Practice, Blackwell Science 2006 3. Coulson A., Lewis N. - "Atlas of Interpretative Radiographic Anatomy of the Dog and Cat", Blackwell Science, 2002.
Planned forms/activities/teaching methods	Multimedia presentations, discussion, practical classes, formulating descriptions of x-ray examinations.
Verification methods and ways of documenting the achieved learning outcomes.	During the module there is a discussion held with students in each class in which they give their own opinions on the evaluation of radiographs. Students work in groups to discuss and then write imaging referrals for the cases presented. They make independent descriptions of radiographs. 5 written assignments are provided for during the module. Written work is graded according to the rule: 2- below 60%, 3 - 61-68%, 3.5 - 69-76%, 4- 77-84%, 4.5 - 85-92%, 5- above 93% . To pass the module, a positive average of all grades and attendance at 85% of the classes are required. The final grade is an average calculated from the current tests.
ECTS credits	**Contact classes:** - participation in classes (5 hours of tutorials, 10 hours of laboratory classes) - 15 hours. (0.5 ECTS) - practical course credit - 2 hours. (0.07 ECTS) 17 hrs total which is equivalent to 0.57 ECTS credits **Non-contact classes:** - preparation for laboratory classes - 6 hours. (0.2 ECTS) - development of class reports - 7 hours. (0.23 ECTS) 13 hrs total which is equivalent to 0.43 ECTS credits
The workload of activities that require direct participation of an academic teacher	- participation in classes (2 hours of tutorials, 13 hours of laboratory classes) - 15 hours. - practical course credit - 2 hours. 17 hrs total which is equivalent to 0.56 ECTS credits
Relation of module learning outcomes to major learning outcomes	K1 – WE- other +++, S1 – WE- other++ S2 - WE_U20++, S3 - WE_U3+, C1 - WE_K13+, C2 - WE_K8+, C3 - WE_K6 +, WE_K7+,

Elements and values affecting final grade	Final grade: Written work No. 1 – 20% Written work No. 2 - 20% Written work No. 3 - 20% Written work No. 4 - 20% Written work No. 5 - 20%