Module code	M_WE_ SEM1 ANAT 1
Field of study	Veterinary medicine
Module name, also the name in English	Anatomia zwierząt 1
	Animal anatomy 1
Language of instruction	Polish
Module type	Mandatory
Level of studies	Long-cycle master's degree studies
Form of study	Full-time
Year of study in the field of study	I
Semester of study in the field of study	I
ECTS credits, divided into contact/non-contact hours	7 (3,5/3,5)
Academic title/degree, name of the person responsible for the module	Lek wet Sylwia Mozel
Unit teaching the module	Department of Animal Anatomy and Histology Faculty of Animal Anatomy
Module objective	The objective of the module is to teach students the proper structure of the skeletal system and bone connections in different species of domestic animals (i.e. dog, cat, cow, small ruminants, pig, horse). To acquire the ability to describe in detail the individual bones of the companion and farm animals mentioned above. To master knowledge of species identification of individual bones (dog, cat, cow, small ruminants, pig, horse) and interspecies differences regarding these bones. To acquaint and teach students how to correctly use Polish and Latin anatomical nomenclature. To impart knowledge that provides a foundation for learning arthrology, myology, splanchnology, and topographic anatomy. To familiarize students with the origin and general structure of bones, bone and muscle connections. To impart anatomical fundamentals regarding the mechanism of movement resulting from the interrelationships between bones, muscles and bone connections and their integration at the body level. To familiarize students with the structure of the toe organ of the horse including skeletal and muscular elements in relation to the layered structure of the common body shell.
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. Students knows the correct general structure of bones, bone and muscle connections, and the detailed structure of the skeletal system of domestic animals.
	K2. The student knows the morphological differences in macroscopic bone structure and bone junctions in domestic animals.
	K3. The student knows Polish and Latin anatomical nomenclature in the field of osteology and arthrology.
	Skills:
	S1. Is able to identify individual anatomical structures on bone preparations of various domestic animal species.

	S2. Recognizes the species affiliation of bones based on their morphological characteristics.
	S3. Correctly identifies and describes types of bone connections.
	S4. He or she has acquired the ability to use Polish and Latin anatomical nomenclature in osteology and arthrology.
	Social competences:
	Sc1. Is aware of the importance of morphological knowledge in osteology and arthrology in the study of clinical subjects.
	Sc2. Is prepared to use and critically evaluate the scientific literature in osteology and arthrology.
	Sc3. Is prepared to correctly use anatomical nomenclature in osteology and arthrology.
	Sc4. Is able to interact with other students in the study of osteology and arthrology.
Prerequisites and additional requirements	None

Module program content	Lectures: 1. Introduction to Animal Anatomy. Discussion of the credit requirements for the course. Rules of conducting partial credit, rules of giving final, semester and course grades. Recommended literature - 2 hrs. 2. The origin of bones and their division - 2 hrs. 3. Microscopic structure of bone - 2 hrs. 4. Macroscopic structure of bone - 2 hrs. 5. Hyoid bone, hyoid bone - 2 hrs. 6. Spinal cord, anatomical structure of the vertebra - 2hrs. 7. Sacrum, caudal vertebrae - 2 hrs. 8. General anatomical structure of muscles - 2 hrs. 9. Muscle division - 2 hrs. 10. Muscle accessory organs - 2 hrs. 11. General structure of the joint, joint capsule - 2 hrs. 12. Division of joints - 2 hrs. 13. Toe organ of the horse - general structure - 2 hrs. 14. Toe organ of the horse - detailed structure - 2 hrs. 15. Vascularization of the equine toe organ - 2 hrs. Practical classes: 1. OSH Discussion of the structure and recognition of structures on the occipital bone - 3 hrs. 2. Discussion of the structure and recognition of structures on the bones: pre-cingulate, basal-cingulate, parietal, interparietal - 3 hrs. 3. Discussion of the structure and recognition of structures on the bones: frontal, temporal - 3 hrs. 4. Discussion and identification of structures on the bones: maxillary, intermaxillary, nasal, zygomatic, and lacrimal - 3 hrs. 5. Discussion and identification of structures on the palatal and pterygoid bones, lemma and mandible - 3 hrs. 6. Recognition of the cervical, thoracic, and lumbar vertebrae and discussion of the structure and recognition of the rib bones - 3 hrs. 7. Discussion of the structure and identification of structures on the humerus, sternum, scapula - 3 hrs. 8. Discussion of the structure and identification of: structures on the bones of the forearm, wrist, metacarpus, and finger bones of the thoracic limb - 3 hrs. 9. Discussion of the structure and recognition of structures on the sacrum, pelvic bone - 3 hrs. 10. Discussion of the structure and recognition of structures on the femur, patella, and recognition of caudal vertebrae - 3 hrs. 11. Discussion of the structure and recognition of: structures on the bones of the lower leg, tarsus, recognition of the metatarsals, bones of the pelvic limb fingers - 3 hrs. 12. Joint preparation of the thoracic and pelvic limb - 3 hrs. 13. Checking the knowledge of macroscopic structure of bones and ability to correctly recognize them and the structures occurring on them - 3 hrs.

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<tr><td></td><td colspan="3">14. Joint preparation of the thoracic and pelvic limb - 3 hours</td></tr>
<tr><td>List of core and supplementary literature</td><td colspan="3">1.König H., Liebich H. – Veterinary Anatomy of Domestic Mammals, Georg Thieme Verlag.
2.Dyce K.M., Sack W.O., Wensing C.J.G.-Textbook of Veterinary Anatomy, Elsevier
3. Shaller O. Edited by: Constantinescu G.M.- Illustrated Veterinary Anatomical Nomenclature, Georg Thieme Verlag.
4.Hermanson J.W., Lahunta A., Evans H.E. - Miller and Evans' Anatomy of the dog. Elsevier</td></tr>
<tr><td>Planned forms/activities/teaching methods</td><td colspan="3">Lecture - multimedia presentations, slides, museum pieces.
Dissecting classes - bone preparations, joint preparations.</td></tr>
<tr><td>Verification methods and ways of documenting the achieved learning outcomes.</td><td colspan="3">During module I one theoretical-practical credit is provided for the material covered during osteology exercises. A test of knowledge of the macroscopic structure of the bones of the skull, the ability to recognize them and identify the structures found on them. Credit is also given for knowledge of macroscopic structure and the ability to correctly identify the bones of the extremities, thorax and spine. The osteology colloquium is taken orally on bone specimens. The examiner will ask three descriptive general knowledge questions about the bones of the skull (1 question), the bones of the thoracic limb, the spine, the bones of the thorax (1 question), and the bones of the pelvic limb (1 question). The student is required to answer all questions satisfactorily. Polish and Latin nomenclature is applicable in the answers. After the general questions, the colloquium instructor randomly selects several bones for identification. The answer to each question is scored on a scale of 2-5, as judged by the examiner based on his or her knowledge and experience. An average is taken from the partial marks for each question to give a final mark for the module. A passing grade on the colloquium is required to pass Module I. In addition, attendance at at least 85% of the exercises in the module plan is required to pass the course.</td></tr>
<tr><td rowspan="14">ECTS credits</td><td colspan="3">CONTACT</td></tr>
<tr><td></td><td>Hours</td><td>ECTS credits</td></tr>
<tr><td>Lectures</td><td>30</td><td>1.2</td></tr>
<tr><td>Practical classes</td><td>41</td><td>1,62</td></tr>
<tr><td>Consultations</td><td>5</td><td>0,2</td></tr>
<tr><td>Retake test</td><td>6</td><td>0,24</td></tr>
<tr><td>Examination / retake examination</td><td>6</td><td>0,24</td></tr>
<tr><td>TOTAL contact hours</td><td>88</td><td>3,5</td></tr>
<tr><td colspan="3">NON-CONTACT</td></tr>
<tr><td>Preparation for classes</td><td>25</td><td>1</td></tr>
<tr><td>Literature study</td><td>25</td><td>1</td></tr>
<tr><td>Preparation for the exam</td><td>36</td><td>1,5</td></tr>
<tr><td>TOTAL non-contact hours/ ECTS credits</td><td>86</td><td>3,5</td></tr>
<tr><td></td><td>Attendance at lectures</td><td>30</td><td>1.2</td></tr>
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The workload of activities that requires direct participation of an academic teacher	Attendance at practical classes	41	1,62
	Retake test	5	0,2
	Consultations	6	0,24
	Examination / retake examination	6	0,24
	TOTAL with direct involvement of the teacher	**88**	**3,5**
Relation of module learning outcomes to course learning outcomes.	W1 --- A.W1. +; A.W2. + W2 --- A.W1. +; A.W2. + W3 --- A.W20. + U1 --- A.U6. +; A.U13. +; A.U15. + U2 --- A.U6. +; A.U13. +; A.U15. + U3 --- A.U6. +; A.U13. +; A.U15. + U4 --- A.U6. +; A.U13. +; A.U15. + K1 --- K8) + K2 --- K4) + K3 --- K4) + K4 --- K9) +		
Elements and values affecting the final grade	Credit - 100% of value		