

Module title:	Dog and cat surgery	ECTS	4
Polish translation:	Chirurgia psów i kotów		
Course:	Veterinary Medicine		

Module language: English	Stage: JM-FVM		
Form of studies: ☒ intramural ☐ extramural	Type of module: ☐ basic ☒ mandatory ☒ directional ☐ elective	Semester: 9	☒ winter semester ☐ summer semester
Academic year: 2021/2022		Catalogue number:	WET-W-JMSS-09Z-K19/3_21

Module coordinator:	Prof. dr hab. Marek Galanty
Teachers responsible for the module:	Academic teachers of the Institute Veterinary Medicine; Department of Small Animal Disease and Clinic. PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study
Objectives of the module:	The objective is for the student to learn basic surgery skills and to gain knowledge of diseases which qualify the patient towards an operation. Explaining how different diagnostic methods (x-ray, USG, laboratory tests etc.) can be used to assess the condition of the potential surgery patient. Teaching a spectrum of surgery procedures and anesthesia protocols which can be used depending on the case. Lecture topics supplement practical classes Course contents: LECTURES (15 lectures, each lecture 45 minutes): 1. Upper respiratory tract obstruction. Diseases, symptoms and differential diagnostics. Indications for surgical treatment. P.I 2. Upper respiratory tract obstruction. Diseases, symptoms and differential diagnostics. Indications for surgical treatment. P.II 3. Surgery of selected thoracic cavity diseases, traumas, collection of liquid in the thoracic cavity, thoracotomy 4. Hernias, causes and types, clinical symptoms, therapeutics. 5. Esophageal diseases in small animals. Types, symptoms and recognition. Treatment 6. Laparotomy, indications, types. Wound closure after the surgery 7. Dilatation and volvulus of the stomach. Etiopathogenesis. Symptoms and diagnostics, conservative treatment and surgery 8. Bowel obstruction, types. Clinical symptoms and diagnostics – indications for surgery treatment. Part I 9. Bowel obstruction, types. Clinical symptoms and diagnostics – indications for surgery treatment. Part II 10. Surgical tumor treatment in animals. Point of treatment. Indications for surgery. Surgical methods of treatment 11. Urinary tract occlusion. Symptoms, diagnostics, treatment. part I 12. Urinary tract occlusion. Symptoms, diagnostics, treatment part II 13. Causes, classification, symptoms and diagnostics of bone fractures in animals. Ad hoc treatment. Biology of fracture healing 14. Indications and methods of surgical fracture treatment. Complications of fracture treatment 15. Joint luxation. PRACTICALS (15 labs, each lab-165 minutes): 1. Wounds – causes, types, wound description, symptoms, diagnostics and treatment Incision and suturing of wounds 2. Skin and soft tissue tumors. Basics in oncologic surgery: BAC, incisional & excisional biopsy. Radical & cytoreduction surgery. Multimodal therapies. 3. Hernias: umbilical, perineal, inguinal. Diaphragmal hernia. 4. External ear surgery. Aural Wounds & hematomas, otitis externa, tumor. 5. Suturing & hemostasis. 6. Urinary tract surgery part I: kidneys, ureters, bladder 7. Urinary tract surgery part II: urethra./ 8. Laparotomy & abdomen surgery. Abdominocentesis

		9. Gastrointestinal tract occlusion part 1: acute gastric dilatation & volvulus (GDV), neoplasms, foreign body, pylorus diseases. Gastrotomy, gastropexia. 10. Gastrointestinal tract occlusion part II: intussusception, neoplasms, conglomerates, foreign body. Enterotomy, enterectomy 11. Traumatology – luxations and fractures. Joint injections 12. Diagnosis and surgical treatment of rectal diseases, neoplasia of anus, rectal prolapse, perirectal gland diseases (inflammation, neoplasia) 13. Amputations (limbs, digits, tails) 14. Rules of ASA classification of patients, considering age, clinical status and disease advancement. Anesthetic protocols & monitoring 15. Cardiorespiratory resuscitation. Practical aspects of small animal euthanasia		
Teaching forms, number of hours:		a) Lectures; hours 15 b) Clinical laboratories; hours 55		
Teaching methods:		Subject is conducted in form of lectures and labs. Wykłady są prowadzone w formie autorskich prezentacji multimedialnych z uwzględnieniem aspektów praktycznych i klinicznych. Labs are based on clinical cases or dead material. Each lab is divided into two parts. In first part individual disease entities (according schedule) are discussed, taking into account possible intraoperative difficulties, prognosis and complications. In the second part of the lab, which may differ from the introductory part, the students are involved in independent practical activities on a cadaver or at the patient under the supervision of an academic teacher. Based on the history, clinical examination and additional tests, differential diagnosis is discussed and the decision on the choice of surgical method is made. The surgical procedure is performed with the assistance of the student and during the surgery each steps of the procedure are discussed and explained. Postoperative management is also discussed, as well as possible complications and solutions. Detailed schedule of consultations will be defined by the coordinator of the course at the beginning of semester.		
Formal prerequisites and initial requirements:		Participating students should be well versed in Animal anatomy, Physiology, Histology and Animal topography, Clinical and laboratory Diagnostic, General Surgery and Anesthesiology Theoretical knowledge and manual skills from abovementioned modules		
Learning effects		Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*
Knowledge:	1	rules for the handling and incapacitation of animals	B.W.4 B.W.5	3, 3
	2	course, clinical symptoms, diagnosis and methods of surgical treatment of selected canine diseases and cats	B.W.2 B.W.3 B.W.4	2, 2, 3
	3	basic issues in the field of anesthesiology	B.W. 6 B.W.9	2, 2
Skills:	1	keep the rules of surgical asepsis while working in the operating theater and participating in operations	B.U. 14	3
	2	carry out all the activities related to preparing the patient for the procedure yourself	B.U.1 B.U.2 B.U.3 B.U.4	3, 3, 3, 3
	3	assist in surgical procedures and perform simple surgical procedures	B.U.11 B.U.13	2, 2
	4			
Competences:	1	plan and conduct treatment in selected surgical units for small animals	K.S.1 K.S.2 K.S.4	2, 2, 2
	2	cooperate in a medical team with an anesthesiologist and support staff	K.S.5 K.S.7 K.S.9	2, 2, 2
	3	update knowledge and following the principles of professional ethics	K.S.4 K.S.5 K.S.8	2, 2, 2
	4	critically assess knowledge and use scientific sources to supplement it	K.S.8 K.S.9	2, 2
	5	share knowledge and competences with others	K.S.3 K.S.9	1, 2
Objectives of the module required to obtain learning effects:		The objective is for the student to learn basic surgery skills and to gain knowledge of diseases which qualify the patient towards an operation. Explaining how different diagnostic methods (x-ray, USG, laboratory tests etc.) can be used to assess the condition of the potential surgery patient. Teaching a spectrum of surgery procedures and anesthesia protocols which can be used depending on the case. Lecture topics supplement practical classes		

Assessment methods:	Final written test: The condition of taking a written test is participation in classes in accordance with the study regulations. Written exam from the material of practical classes and lectures in the form of a single-choice verification tests and open questions. No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.
Detail description of assessment methods; Formal documentation of learning outcome:	The 20 single-choice test questions (each rated 1 point) and 5 open (each rated 2 point) A total of 30 points can be obtained. In order to pass the student must obtain at least 19 points. Rating scale 3.0: 19-20 points 3.5: 21-22 points 4.0: 23-25 points 4.5: 26-28 points 5.0: 29-30 points The test I and the retake test are in the same form. Apart from the indicated methods of verification of learning outcomes (form, number) no additional are foreseen. In a top-down situation, suspending the implementation of classes at the University and the need for distance learning, other methods of verifying the learning outcomes will be implemented appropriately to the situation. No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted. eHMS entry. Records collected in the course portfolio i.e. individual records of student results, presence lists, database of oral and written questions, written assessments of the students.
Elements impelling final grade:	100% test. The condition of obtaining a final credit is to obtain at least a satisfactory grade from the final written test from the material of practical classes and lectures. At the beginning of the semester (in agreement with the foreman of the year), three possible dates will be set, of which the student will be able to join two dates convenient for him/her. It is not possible to proceed outside the set dates. Random absences from these dates will not be taken into account.
Teaching base:	Lecture room, operating theatre, consultation rooms
Mandatory and supportive materials : 1. Small Animal Surgery, Third Edition, Theresa Welch Fossum, Mosby Elsevier 2007 2. Relevant scientific publications, including those of the module coordinator.	
ANNOTATIONS	

* 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