SZKOŁA GŁÓWNA GOSPODARSTWA WIEJSKIEGO

Management of life-threatening situations in small animal anaesthesia

Educational subject description sheet

Basic information

Field of study Veterinary Medicine	**Didactic cycle** 2024/25
Speciality -	**Subject code** WETFVMS_D.5400K.633d37ec56413.24
Organizational unit Faculty of Veterinary Medicine	**Lecture languages** english
Study level long-cycle	**Mandatory** Elective subjects
Study form full-time studies	**Block** Major subjects
Education profile General academic	**Disciplines** Veterinary medicine

Coordinator	Agnieszka Wrzesińska
Teacher	Agnieszka Wrzesińska

Period Semester 11	**Examination** Pass with grade **Activities and hours** Laboratory exercises: 15	**Number of ECTS points** 1

Goals

Code	Goal
C1	The aim of the course is to teach the diagnostic methods and treatment used in anesthesiological emergency states.

Entry requirements

Students should have theoretical and practical knowledge acquired in the animal physiology, animal pathophysiology and clinical and laboratory diagnostics.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge – Student knows and understands:			
W1	the basic interpretation of monitoring parameters during anesthesia	B.W3, B.W4	Test (written or computer based)
W2	which drug to choose depending on the emergency state during anesthesia	B.W3	Test (written or computer based)
Skills – Student can:			
U1	make a decision on the proper anesthetic plan (drug, indication) according to the animal's concurrent diseases prior to anesthesia procedure	B.U4	Test (written or computer based)
U2	create analgesia plan based on the clinical state of the animal	B.U4	Test (written or computer based)
U3	diagnose life-threatening state during anesthesia	B.U4	Test (written or computer based)
Social competences – Student is ready to:			
K1	decide which drug to use in life-threatening states during anesthesia and create analgesia plan according to the severe state of the animal	KS.10	Test (written or computer based)

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	The course will encompass the following topics: - diagnostic evaluation and treatment of life-threatening states during anesthesia (hypovolemia, hypotension, hypertension, hypoventilation, pulmonary oedema, hyperthermia, apnea, hypothermia, arrhythmias, prolonged recovery) - creating anesthesia and analgesia plan for the animals with concerrent diseases that might be life-threatening during anestehsia (respiratory distress, cardiovascular insufficiency, endocrynology, neurological disorders) -diagnostic of the life-threatening states based on the parameters during anesthesia monitoring (ETCO2, SPO2, ECG, RR, HR, SAP, MAP, DAP, TEMP) - diagnostic evaluation of pain and providing adequate analgetic plans according to the ainmal's clinical state	W1, W2, U1, U2, U3, K1	Laboratory exercises

Course advanced

Activities	Methods of conducting classes
Laboratory exercises	Conversation lecture, Case study

Activities	Examination method	Percentage
Laboratory exercises	Test (written or computer based)	100%

Activities	Credit conditions
Laboratory exercises	students must have at least 80% presence at seminars students must prepare clinical anestesiological case presentation final test

Literature

Obligatory

1. Johnson R. A.: Canine and Feline Anesthesia and Co-Existing Disease, Blackwell Publishing, 2021.
2. Dugdale H. A., Beaumont, G., Bradbrook, C., Gurney M.: Veterinary Anaesthesia Principles to Practice, Wiley and Sons, 2020.
3. Duke-Novakovski T., de Vries M, Ch. Seymour.: BSAVA Manual of Canine and Feline Anaesthesia and Analgesia, Wiley and Sons, 2016.

Optional

1. Lerche P.: Handbook of Small Animal Regional Anesthesia and Analgesia Techniques, Wiley and Sons, 2016.
2. Lin T., Smith T., Pinnock C., Mowatt Ch.: Fundamentals of Anaesthesia. Cambridge Uniwersity Press, 2016.
3. Grimm K. A., Lamont L. A., Tranquilli W. J., Greene S. A., Robertson S. A.: Veterinary Anesthesia and Analgesia, Wiley and Sons, 2015.
4. Clarke K. W., Trim C. M., Hall L. W.: Veterinary Anaesthesia, Elsevier Health Sciences, 2013.
5. Grimm K. A.: Essentials of Small Animal Anesthesia and Analgesia, Iowa State University Press, 2011.

Calculation of ECTS points

Activity form	Activity hours*
Laboratory exercises	15
Self-study on the content covered in class	5
Preparation for the exam	2
Preparation for exercises	5
Conducting literature research	3
Student workload	**Hours** 30
Number of ECTS points	**ECTS** 1

* hour means 45 minutes

Effects

Code	Content
KS.10	Absolwent jest gotów do działania w warunkach niepewności i stresu
B.U4	Absolwent potrafi udzielać pierwszej pomocy zwierzętom w przypadku krwotoku, ran, zaburzeń oddechowych, urazów oka i ucha, utraty przytomności, wyniszczenia, oparzenia, uszkodzenia tkanek, obrażeń wewnętrznych i zatrzymania pracy serca
B.W3	Absolwent zna i rozumie przyczyny i objawy zmian anatomopatologicznych, zasady leczenia i zapobiegania w poszczególnych jednostkach chorobowych
B.W4	Absolwent zna i rozumie zasady postępowania diagnostycznego, z uwzględnieniem diagnostyki różnicowej, oraz postępowania terapeutycznego