

#### UNIVERSIDADE DE LISBOA

# Faculdade de Medicina Veterinária

# **Surgical Propaedeutics and Anesthesiology**

Curricular Year: 3<sup>rd</sup> Duration: 2<sup>nd</sup> Semester Credits: 11 ECTS

**Teachers**: Lisa Mestrinho (CCP and R); Ana Reisinho; António Ferreira; Esmeralda Delgado; Hugo Miguel Ramos; George Stilwell; Jorge Correia; Luís Miguel Carreira; Luís Lamas; Leonor Iglésias; Maria Teresa Brito; Rui Lemos; Sandra Jesus; Teresa Rosa.

Contact Hours: 156H Total.

56H Lectures; 84H Practical and laboratory teaching; 16H Tutorial orientation.

#### **Learning objectives:**

At the end of the curricular unit, the student must

- 1. Be able to perform the basic functions of the different members of a surgical team
- 2. Identify, design and apply the most appropriate anesthetic protocol for the species and surgical context
- 3. Know how to use anesthetic administration equipment and monitor anesthetized animals in a safe and effective way
- 4. Know and use the diagnostic methods indicated in the surgical context, namely diagnostic imaging and analytical parameters
- 5. Perform an appropriate suture to the target tissue with technique and sequence, and small surgical procedures
- 7. Acquire behaviors, postures and attributes essential to the performance of the medicalveterinary profession in the clinical context of surgery
- 8. Acquire autonomy and research and self-learning skills, formulating questions in surgery and anesthesia that lead to a continuous process of updating and acquiring skills beyond those taught in this UC.

# **Program contents:**

- 1. Pre-anesthetic care
- 2. Anesthetic monitoring: parameters and equipment
- 3. Local anesthesia: agents, mechanisms and techniques
- 4. General anesthesia: agents, mechanisms and systemic effects, anesthetic stages and plans, equipment and circuits, combined protocols
- 5. Anesthetic protocols adapted to special physiological conditions, further by species or group
- Analgesia mechanisms and assessment of pain, therapeutic targets and analgesics
- 7. Other intra and post anesthetic care
- 8. Euthanasia, concepts and practices
- 9. Concepts related to the operating room
- 10. Surgical terminology
- 11. Surgery equipment and materials
- 12. Healing applied to surgery manipulation, dieresis and tissue synthesis, wound management, bone healing



## UNIVERSIDADE DE LISBOA

# Faculdade de Medicina Veterinária

- 13. Surgical contexts, applied imaging diagnosis and supportive treatments in surgery
- 14. Transfusion medicine and fluid therapy relevant in anesthesia and surgery
- 15. Types of shock, clinical signs, diagnosis and treatment.

#### **Bibliography:**

Handouts and videos provided by the teaching staff.

Relevant scientific articles for the area provided by the teaching staff.

Books

Griffon D, Hamaide A (2016). Complications in small animal surgery. Wiley Blackwell.

Grimm KA, Lamont LA et al (2015). Lumb and Jones' Veterinary Anaesthesia and Analgesia, 5ª ed, Wiley Blackwell.

Jonhston and Tobias (2017). Veterinary Surgery: Small Animal Expert Consult, Elsevier - Health Sciences Division.

Thrall DE (2013). Textbook of Veterinary Diagnostic Radiology, 6<sup>a</sup> ed, Elsevier.

Nyland TG, Mattoon JS (2015). Small Animal Diagnostic Ultrasound, 3a ed, Elsevier

Fubini SL, Ducharme NG (2017). Farm Animal Surgery, 2ª ed, WB Saunders

Swaim SF, Renberg WC, Shike KM (2011), Small animal bandaging, casting and splinting techniques, Wiley-Blackwell

Williams J, Moores A (2009). BSAVA Manual of Canine and Feline Wound Management and Reconstruction, 2<sup>a</sup> ed, British Small Animal Veterinary Association

### Assessment:

The assessment of the theoretical component will be carried out through a written exam with questions of various formats and different degrees of difficulty and aimed at evaluating the different dimensions of knowledge.

The practical component will be assessed in a continuous assessment system throughout the practical classes. This is split in 2 components both with similar weight (50%) of the total practical evaluation:

- i. Practical assessment moments during the class period and in a simulated context (synthetic or biological model);
- ii. Carrying out group work that includes critical reflection on the knowledge taught.

The weight of each assessment method on the value of the grade is 50%. However, only students who, without exceeding the limit of 1/5 of absences from practical classes, will be admitted to the theoretical exam who obtain a positive evaluation in this component.

Student assessment will allow us to assess the effectiveness of the teaching-learning methodologies used in achieving the UC's learning results. This way will allow appropriate adjustments to be made to teaching and knowledge and skills assessment methodologies.

The final classification will be obtained using the formula CF = 0.5 T + 0.5 P (0.5 continuous assessment + 0.5 Group work).