

SURGICAL SEMIOLOGY and OPERATIVE TECHNIQUES

Study Program: MIMV Curricular Year: 3rd Semester: 6th Compulsory Credits: 4.5 ECTS

Lecturer(s): António Ferreira (CCP), Lisa Mestrinho (R), Esmeralda Delgado, Luís Miguel Carreira, Jorge Correia, Luís Lamas, António Martinho.

1. Contact hours:

Theoretical – 26 hours, **Practical** – 26 hours, **Total** – 52 hours

2. Objectives:

Teach students the fundamental concepts of surgery (objectives and basic principles of surgery). Students will acquire theoretical and practical skills related to the entire peri-surgical management of the animal, surgeon, equipment, and facilities. They should also acquire theoretical knowledge and practical skills in basic surgical techniques for large and small animals.

3. Program:

Theoretical sessions

- Introduction to the operating room
- Common surgical problems
- Approach to the surgery patient: perioperative care
- Microorganism reduction: concepts and assessment. Antimicrobials in surgery.
- Inflammation and repair in surgery context.
- Surgery terminology
- Hemostasis and tissue handling
- Tissue synthesis: features, materials, and techniques
- Osteosynthesis principles
- Wounds and wound care
- Dressings and bandages.
- Transfusion medicine applied to the surgical patient.
- Types of surgery, from classical to minimal invasive surgery
- Introduction to ophthalmic microsurgery
- Common surgery complications and errors

Practical sessions

- Asepsis and surgical team preparation.
- Surgical instruments and equipment.
- Suture training: patterns applied to different tissues and species
- Basic osteosynthesis technique training
- Bandages
- Basic surgical procedures in dogs and cats
- Food animal hoof care
- Basic lab in equine abdominal surgery

4. Bibliography:

Teaching materials produced by the teaching team.

Kirpensteijn, J., Haar, G.T. (2021) *The Cutting Edge: Basic Veterinary Surgery Techniques*. Sorry For Saying Sorry Media Inc, Lawrence KS, USA, 3rd Editions.

Griffon, D. & Hamaide, A. (2016). *Complications ins small animal surgery*. Wiley Blackwell.

Johnston S.A., Tobias, K.M. (2018). Veterinary surgery: small animal expert consult, 2nd edition. Saunders.

Hendrickson D.A. & Baird, A.N. (2013) Turner and Mcllwraith's techniques in large animal surgery, 4th edition. Wiley Blackwell.

Scientific papers relevant to the curricular unit.

5. Assessment:

The students' knowledge and acquired competences are evaluated continuously (20%) (attendance, active participation in practical labs and an oral presentation combined) and a final written examination including all theoretical and practical contents (80%)