

ANESTHESIOLOGY AND ANALGESIA

Study Program: MIMV Curricular Year: 3rd Semester: 5th Compulsory Credits: 4.0 ECTS

Lecturer(s): António Ferreira (CCP) Lisa Mestrinho (R) George Stilwell

1. Contact hours:

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

2. Objectives:

Provide students fundamental knowledge of anesthesiology and analgesia, in order to enable them to practice anesthetic techniques (general and localized), more common in various animal species. Enable students to assess and correct possible systemic complications that occur during anesthesia.

This course also aims to provide students with the basic scientific knowledge that will facilitate their updating as a permanent practice, in order to be able to follow the scientific and technological innovations that occur within its scope, as well as to seek to stimulate their interest in this subject. update.

3. Program:

- Local anesthesia. Mechanisms of action of local anesthetics, main local anesthetics, techniques of local anesthesia and analgesia; techniques of regional anesthesia and analgesia.
- General anesthesia: Mechanisms of action of general anesthetics; intravenous and inhalation anesthesia. Equipment and techniques.
- Analgesia: pain recognition and assessment. Analgesics: groups and therapeutical targets, indications, and risks.
- Pre-anesthetic care: Clinical examination, selection of the anesthesia technique, preanesthetic medication, and equipment verification.
- Intra-anesthetic care: monitorization of the patient, control of equipment, muscle relaxation, anesthetic accidents.
- Post-anesthetic care.
- Cardiorespiratory arrest: assessment and treatment.
- Anesthesia in the different animal species.
- Anesthesia in special clinical conditions (e.g. hepatic disease, cesarean, etc.).
- Euthanasia.

4. Bibliography:

Teaching materials produced by the teaching team.

Grimm K.A., Lamont, L.A., et al. (2015). *Veterinary Anaesthesia. And Analgesia: the fifth edition of Lumb and Jones*, 5th edition, Wiley Blackwell.

Duke-Novakovski, T. (2016). *BSAVA Manual of Canine and Feline Anesthesia*, 3rd edition, British Small Animal Veterinary Association.

Hendrickson, D.A. & Baird A.N. (2013). *Turner and McIlwraith'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 with a final written examination including all theoretical and practical contents.