

## REHABILITATION AND PHYSIOTHERAPY IN SMALL ANIMALS

**Study Programme:** MIMV    **Curricular Year:** 5<sup>th</sup>    **Semester:** 9<sup>st</sup>    **Optional**    **Credits:** 2.5 ECTS

**Lecturer(s):** António J. A. Ferreira (CCP), Fernando A. C. Ferreira (R), Luís M. A. Ferreira, Maria Manuela G. R. E. Nisa, Graça Pires Melo, Ilda Gomes Rosa, Berta M. F. F. São Braz e Luís M. A. Carreira

**1. Contact hours:** Lectures - 20h; Practicals – 8h; Total - 28h

**2. Objectives:** Acquisition of knowledge and skills on the assessment of physical mobility in dog and cat requiring physical rehabilitation. Learn the different rehabilitation techniques used in small animal physiotherapy.

**3. Programme:** Theoretical - historical aspects and regulatory legislation of veterinary physical rehabilitation in Portugal, Europe and worldwide. Functional anatomy and biomechanics of locomotion: linear kinetics and angular kinematics. Spine and peripheral joints biomechanics (angles, movement, stiffness and instability) and mobilization. Behaviour and pain assessment in dog and cat. Evaluation of neurological (functional tests and complementary imaging techniques), orthopaedic (static and dynamic observation, palpation techniques and functional tests), arthritic patients and geriatric animal patient. Techniques for physical rehabilitation (fundamentals and applications): kinesiotherapy, massage, cryotherapy, thermotherapy, hydrotherapy, electro-neuro-muscular stimulation, laser therapy, ultrasound therapy and magnetotherapy. Physical rehabilitation of the neurological, orthopaedic, arthritic and geriatric disorders, most commonly seen in small animal clinics. Pharmacological and nutritional support in patients with physical rehabilitation needs. Practical - Design rehabilitation protocols using case studies. Visualization and application of material used in rehabilitation techniques. Perform some of the rehabilitation techniques mostly used in small animal clinics.

#### 4. Bibliography:

Levine, D., Mills, D., Marcellin-Little, D. & Taylor, R. (2008). *Reabilitação e fisioterapia na prática de pequenos animais*. Editora Roca.  
McGowan, C., Goff, L. & Stubbs, N. (2007). *Animal Physiotherapy: Assessment, Treatment and Rehabilitation of Animals*. Wiley-Blackwell.  
Millis, D., Levine, D. & Taylor, R. (2013). *Canine rehabilitation & physical therapy*. 2<sup>en</sup> Edition. Elsevier.

#### 5. Assessment:

Examination in 40 multiple-choice and short questions.