

## MULTIDISCIPLINARY PERSPECTIVE OF PAIN MANAGEMENT

**Study programme: MIMV Curricular Year: 4<sup>th</sup> Semester: 2<sup>nd</sup> Optional Credits: 2.5 ECTS**

**Lecturer(s):** António J. A. Ferreira (CCP), Berta M.F.F. São Braz (R), José H. D. Correia, Ilda M. N. G. Rosa, George T. Stilwell, Luís M. A. Carreira, Luís R.G.P. Lamas, Mariana Magalhães, Gonçalo Vicente, Ana T. S. C. Reinho.

### 1. Contact hours:

**Lectures – 20; Practicals – 8; Total - 28**

### 2. Objectives:

Provide students with skills that allow them to: Recognize the importance of pain and its management/treatment as fundamental to keep the welfare and the life quality of the animal; Recognize patient pain by the in-depth knowledge of the evaluation criteria and pain qualification; Update and deepen the knowledge of the drugs used in the pain management in a multimodal perspective, Recognize the usefulness of non-pharmacological methods in a multimodal approach to pain management; Deep knowledge in the management of acute and chronic pain; Recognize the importance of pain management in the welfare and productivity of livestock species - cattle and horses; Recognize the importance of pain management in the welfare of exotic species.

### 3. Programme:

Animals pain and welfare. Why to relieve pain? Associate ethical problems. Pain Physiology and Pathophysiology – how pain is produced.

How to recognize pain in animals? Pain assessment and rating scale. Pharmacological pain management. Main Pharmacotherapeutic groups - analgesics, NSAIDs,  $\alpha 2$  adrenergic agonists, new pharmaceuticals. Anaesthetics. Local and locoregional anaesthesia.

Acupuncture and physical rehabilitation as complementary elements in a multidisciplinary approach in pain management. The management of acute pain: visceral pain, trauma and pre, intra and postoperative pain. The management of chronic pain: osteoarthritis, cancer pain, and others. Veterinary Medicine *versus* human medicine realities. Pain management in ruminants. Pain management in horses. Pain management in exotic animals.

### 4. Bibliography:

Gaynor, J.S. & Muir, W.W. (2014). *Handbook of Veterinary Pain Management*, 3rd Ed., Mosby-Elsevier.

Haynes, R.P. (2010). *Animal Welfare. Competing Conceptions and their Ethical Implication*. 1st Ed. Springer.

Lumb & Jones, *Veterinary Anesthesia and Analgesia*, 6th Ed. Willey Blackwell

Vários (2008). Update on pain management. *Veterinary Clinics of North America: Small Animal Practice*, volume 38, Elsevier.

“Perspetiva multidisciplinar do manejo da dor”. Apontamentos da unidade curricular fornecidos pelos docentes.

Recommended Scientific papers.

### 5. Assessment:

The students' knowledge is evaluated at the end of the term with a written examination including theoretical and practical subjects. The final mark results from that examination and a minimum of 10 (in a range of 0 to 20) should be obtained for approval.