

<b>Course:</b>	M547 - Veterinary Nursing in Small Animals Master
<b>Degree:</b>	Master
<b>Curriculum Unit:</b>	4001011 - Physical Rehabilitation Techniques
<b>Scientific field:</b>	Veterinary Sciences
<b>ECTS<sup>(*)</sup>:</b>	6
<b>Curriculum year:</b>	1st
<b>Curriculum semester:</b>	2nd
<b>Frequency Regime:</b>	Semestrial
<b>Teacher(s):</b>	Carmen Lúcia Vasconcelos Nóbrega Carla Sofia Arede dos Santos Helder Miranda Pires Quintas Ana Cristina Mega Pais de Andrade
<b>Contact hours <sup>(**)</sup>:</b>	TP-23; TO-25
<b>Total work time (hours):</b>	150

(\*) - ECTS - European Credit Transfer and Accumulation System

(\*\*) – T- Theoretical; TP- Theoretical/Practical; LP- Lab Practice; S- Seminars; I- Internships; TU - Tutorials; TO – Tutorial Orientation; O- Other (Evaluations)

## Objectives / Competences

Have a comprehensive knowledge of the anatomy of the patient: major muscle groups, joints and major types of nervous structures. An understanding of different physiological mechanisms related to the healing of different types of tissues and related to muscle metabolism; recognize the neurophysiological mechanisms of pain and how can the physical rehabilitation techniques involved in various mechanisms.

Able to recognize different assessments regarding the clinical evaluation of pain and lameness, and neurological examination musculoskeletal patient. Mastering the different therapeutic modalities, with regard to their mode of action and its technical application and implementation in different clinical conditions. Know and interpret the different techniques for physical rehabilitation and its implementation.

Relate Anatomy, Physiology with Animal Rehabilitation. Develop techniques and recognizing its applicability.

## Syllabus

The syllabus in its recovery scientific and experimental preparation will meet the objectives of the curriculum unit, in particular in the field of physical rehabilitation techniques. In addition to the knowledge of Anatomy and Physiology, Neurology for good basic understanding of patient and its pathologies, the approach of different rehabilitation techniques are listed. This multitude of techniques and equipment involved will be discussed and promoted in the context of work, allowing the combination between the pathology and the technical approach and equipment. Thus fits the basic knowledge about Veterinary Anatomy and Physiology, for small animals and, subsequently, the different techniques and its specificity for the recovery of patients.

Enhancement of rehabilitation intervention and their knowledge, this curriculum unit first objective will thus obtain, allowing the veterinary nurse competence in this particular area.

### **Teaching methodologies and evaluation criteria**

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Learning strategies to be adopted will be based on active methodologies, dynamic and participatory, to encourage trainees to participate actively in the entire teaching process. The teaching methodology comprises theoretical-practical lessons, laboratory and other practices, with a strong component exhibition and demonstrative, in work context, giving special focus to practical cases. The group work will be encouraged, development team spirit relevant for this theme. The evaluation will be proposed to the students performing written evaluation moments, theoretical-practical intervention, with discussion of techniques, methodologies and protocols and group work. The curriculum unit develops in 30hours of theoretical-practical classroom and experimental laboratories. The 20 hours of practical teaching-laboratory held in Veterinary Clinics or Hospitals in the context of work.

### **Short bibliography**

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- Canapp, D.A. (2007). Select Modalities. Clin Tech Small Anim Pract 22:160-165
- Hesbach, A.L. (2007). Techniques for Objective Outcome Assessment. Clin Tech Small Anim Pract 22:146-154
- Hordebaigt, J.P., (2004). Canine Massage- a Complete Reference Manual (2nd edition) EUA, Ed. Dogwise Publishing
- Jaggy, A., Platt, A.R, (2010). Small Animal Neurology – an illustrated text. Germany, Schlütersch Verlagsgesellschaft mbH&Co (ISBN 978-3-89993-026-9)
- Kornegay, J.N., Lorenz, M.D., (2006). Neurologia Veterinária (4ª Ed.) Brasil, Ed. Manole
- Lawrence, K. (2006) Canine mobility and physiotherapy, Veterinary Nursing Journal, 21:10, 24-26
- Levine, D., Millis, D. L., Taylor, R.A. (2004). Canine Rehabilitation &Physical Therapy . EUA, Elsevier (ISBN 0-7216-9555-8)
- Pedro, C.R, Solange, M. (2009). Fisioterapia Veterinária (2ª Edição) Brasil, Ed. Manolo
- Sharp, B. (2012). Feline physiotherapy and rehabilitation 1. Principles and potential. Journal of Feline Medicine and Surgery, 14, 622–632