

PHARMACOLOGY AND THERAPEUTICS II

Study Programm: MIMV Curricular Year: 3rd Semester: 6th Compulsory Credits: 5 ECTS

Lecturer(s): Berta M.F.F. São Braz (CCP and R), Anabela S. S. S. Moreira, Ana M. G. X. F. Lourenço, Frederico N. C. A. Silva, Esmeralda S. C. Delgado, Paula A. B. G. A. P. Tilley, Rodolfo A. O. Leal, Gonçalo E. V. Vicente, Ana T.S.C. Reisinho, Rui Máximo.

1. Contact hours:

Lectures – 26; Praticals – 26; Lecture/Practicals – 13; Total - 65

2. Objectives:

The main goal is to prepare students to the acquisition and use of basic and specific knowledge's of organotropic drugs that modifies organic functions, for a forward application in a therapeutic context. The students are required to obtain knowledge's on organotropic drugs pharmacokinetic and pharmacodynamics to know and understand therapeutic potentialities and limitations.

The student must fit a formative profile that allows him to choose, explain, discuss, evaluate and use the best strategies on functions pharmacotherapy. These must allow the application of the rules and the evaluation of conditionality on drugs prescription and use in face of its activity and valorisation, taking in accounts the risks and potential accidents.

3. Programme:

Study of functional drugs (organotropics). Drugs acting on central nervous system. Central mediators and mechanism of action. Brain and spinal cord stimulants. Medullar depressors: psychodrugs, sedatives, hypnotics and tranquilizers, antipsychotics, antidepressants, analgesics with central action, analgesic-antipyretics, general and local anaesthetics, anticonvulsants.

Autonomic nervous system drugs with action under cholinergic, adrenergic and dopaminergic systems. Neuromuscular transmission drugs, autacoids.

Cardiovascular system drugs. Drugs acting on blood. Drugs acting on urinary and respiratory systems. Drugs acting on genital apparatus and digestive apparatus of mono and polygastric animals. Drugs for topical use. Anti-inflammatory drugs (corticosteroids and nonsteroids). Antitumoral chemotherapeutic and immunopharmacology (cytostatics and immunomodifiers).

Techniques and methodologies for individual and/or group therapeutics. Pharmaceutical preparations and galenic pharmacy practices. Pharmacotherapy in Veterinary Medicine.

4. Bibliography:

Riviere, J.E. & Papich, M.G. (Eds). (2018). *Veterinary Pharmacology and Therapeutics*. 10^a Ed., Wiley Blackwell.

Plumb D.C. (2018). *Plumb's Veterinary Drug Handbook*, 9^aEd. Wiley Blackwell.

Guimarães, S., Moura, D. & Soares da Silva, P. (2014). *Terapêutica Medicamentosa e Suas Bases Farmacológicas*. 6^a Ed., Porto Editora.

Boothe, D.M. (2011). *Small Animal Clinical Pharmacology and Therapeutics*, 2^a Ed., W. B. Saunders Company.

Spinosa H.S., Górnjak, S.L. & Bernardi, M. (2017). *Farmacologia Aplicada à Medicina Veterinária*, 6^a Ed. Guanabara/Koogan.

Allerton, F. (2023). *BSAVA Small Animal Formulary*, 11th Ed. British Small Animal Veterinary Association.

Lana (2011). *Chemotherapy*. BSAVA Manual of Canine and Feline Oncology. Eds. Dobson & Lascelles 3^aEd.

5. Assessment:

The students' knowledge is evaluated at the end of the term with a written examination including theoretical subjects and also a practical examination. Final marks are the mean of the two exams (scale 0 to 20), with a minimum of 10 to approval.