

OCULAR REPERCUSSIONS OF SYSTEMIC DISEASES

Study Programme: MIMV **Curricular Year:** 4th **Semester:** 7th **Optional** **Credits:** 2.5 ECTS

Lecturer(s): José Paulo P. Sales Luís (CCP), Esmeralda S. C. Delgado (R), Maria Teresa Villa de Brito, Paula P. Tilley, Ana Mafalda F. Lourenço, Virgílio S. Almeida, George Stilwell, Rita Fonseca, Hugo Plissarra

1. Contact hours:

Lectures - 20 Practicals - 8

2. Objectives:

Students must recognize the systemic diseases that induce ocular pathology, understand their etiopathogeny and be familiar with their symptoms, including the ocular signs. For that students must know the anatomy and the physiology of the ocular globe and adnexa, be able to perform a complete ophthalmic examination, recognize clinical ocular signs, design a diagnostic plan, reach the main differential diagnosis and choose the special examination techniques that apply. Understand the importance of clarifying the owners about the adopted methods. After reaching a diagnosis, students must be capable of elaborating the correct medical or surgical treatment protocol, and of designing a follow-up plan for the clinical case.

3. Programme:

Theoretical: Anatomophysiology of the eye. Systematic ophthalmological examination. Ocular ultrasonography and Computed Tomography – practical approach with clinical cases. Pathology of the orbit. Conditions of the eyelids, conjunctiva and nictitating membrane. Ulcerative and non ulcerative diseases of the cornea. The uveal tract and the aetiologic approach to uveitis. Lens pathology, with emphasis on cataracts and its surgical resolution. More common hereditary and acquired retinal diseases. Glaucoma – diagnosis, treatment and prognosis. Ocular manifestations of endocrine, metabolic, infectious and parasitic diseases. Ocular repercussions of immune mediated, dermatologic and oncologic diseases. Equine Ophthalmology. Exotic animal ophthalmology. Bovine and porcine ophthalmology. Practicals: The systematic ophthalmic examination. Ocular reflexes, Schirmer tear and fluorescein tests. Gonioscopy. Direct and indirect ophthalmoscopy. Tonometry and biomicroscopy. Conjunctival and eyelid swabs for bacteriology, virology, mycology and cytology. Ocular biopsy. Anterior and posterior chamber paracentesis. Ocular ultrasonography. Exemplification in dog cadaver heads and performance by students of extraocular surgery techniques like enucleation, exenteration, evisceration with implant prosthesis intraescleral, paracentesis of the anterior chamber and vitreous chamber. Presentation and discussion of clinical cases.

4. Bibliography:

Notes on the subject by the professors.

Gelatt, K. N., Gilger, B. C., & Kern, T. J. (2013). *Veterinary Ophthalmology, 5th Ed.* (B. C. Gilger & T. J. Kern, Eds.) (5th Ed.). Wiley-Blackwell, A John Wiley & Sons, Inc., Publication

Gelatt, K. & Gelatt, J. (2011) *Veterinary Ophthalmic Surgery*. Saunders Elsevier. ISBN 978-0-7020-3429-9

Gilger, B. (2011) *Equine Ophthalmology*. 2ª edição. Saunders Elsevier. ISBN: 978-1-4377-0846-2

David Gould, Gillian McLellan (2014) *Manual of Canine and Feline Ophthalmology*, BSAVA, 3rd Edition, ISBN: 978-1-905319-42-8

David Williams (2012). *Ophthalmology of Exotic Pets*. Wiley-Blackwell. ISBN: 978-1-4443-3041-0

Dubielzig, R., Ketrings, K., McLellan, G. & Albert, D. (2010). *Veterinary Ocular Pathology - A Comparative Review*. Elsevier.

4. Assessment:

The students' knowledge is evaluated at the end of the term with a written examination containing 40 questions of different types: short answer, true or false or multiple choice questions. The exam is worth 80% of the final grade. The presentation and discussion of a clinical case in groups of students will be worth 20% of the final grade.