

PATHOLOGY AND CLINICS OF PARASITIC DISEASES

Study Programme: MIMV Curricular Year: 4th Semester: 7th Compulsory Credits: 4.5 ECTS

Lecturer(s): José Silva Meireles (R), Luis Madeira de Carvalho (CCP), Isabel Pereira da Fonseca

1. Contact hours:

Lectures - 26 Practicals - 26 Total 52

2. Objectives: Contribution for the student's education on Animal Health particularly related to basic concepts and general methodologies used on the characterizations and control of infectious diseases affecting dogs, cats, horses, cattle, sheep, goats, pigs, poultry, rabbits, exotics pets and bees. Relevance for Public Health, livestock production and animal welfare.

3. Programme: Theoretical: Parasitic Diseases of some animal species and their importance in Public Health and Animal. Etiopathogenesis; symptoms and lesions, diagnosis, prophylaxis and treatment. Parasitic diseases of dogs, cats, horses, cattle, sheep, goats, pigs, poultry, rabbits, exotic animals and bees.

Practical: Diagnostic techniques of various parasites: Exams: dermatological (scabies, lice, fleas, ixodid, etc.), hematologic (microfilariae, hemoprotozoários, etc.), serological (*Leishmania*, *Neospora*, *Toxoplasma*, *Anaplasma*, *Rickettsia*, *Babesia*, *Ehrlichia*, etc.) secretions (*Trichomonas*), tissues (*Toxoplasma*, *Leishmania*, *Trichinella* etc..) and stool tests (qualitative and quantitative). Reference and use of some indirect methods of diagnosis, direct agglutination, direct and indirect immunofluorescence, ELISA, indirect hemagglutination and others. Necropsy, harvesting, preserving and identification of parasitic specimens.

4. Bibliography:

Bowman, D.D. (2009). *Georgi's Parasitology for Veterinarians*. W.B. Saunders Co., Philadelphia.

Bussi ras, J., Chermette, R. (1991). *Abr g  de Parasitologie V t rinaire, Fasc. I Parasitologie G n rale*, 76pp., *Fasc. II. Protozoologie V t rinaire*, 186 pp., *Fasc. III. Helminthologie V t rinaire*, 299 pp, *Fasc. IV. Entomologie V t rinaire*, 164 pp. Ecole Nationale V t rinaire d'Alfort, Service de parasitologie.

Cordero Del Campillo, M. & Rojo V zquez, F..A. (1999). *Parasitologia Veterinaria*. McGraw- Hill, Interamericana, Madrid. 968 pp.

Kassai, T. (1999). *Veterinary Helminthology*. Butterworth-Heinemann, Oxford, 260 pp.

Manual de Pr ticas de Patologia e Cl nica das Doenas Parasit rias elaborado pelos docentes das aulas pr ticas. FMV/UL.

5. Assessment: The final exam consists of two parts, one theoretical and one practical.

The theory is written with an objective, in the form of selection of multiple choice questions, true and false, and development issues.

The practical test includes several points of examination that included the identification of three preparations related to adult and larval forms of helminths, protozoa, mites or insects, making a parasitological diagnostic technique: Search Trichinella, Leishmania, scraping skin, puncture nodes or bone marrow, stool tests, heartworm research and parasitic necropsy.

The two races each have a maximum duration of 2 (two) hours. The final grade results from the continuous assessment of students (attendance, interest and participation in class) and the average marks in the theoretical and practical tests. The minimum passing grade is 10 (ten), both for the theoretical test or for practice.