

PARASITOLOGY I

Study Programme: MIMV Curricular Year: 2nd Semester: 3rd Compulsory Credits: 5.0 ECTS

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

1. Contact hours: Lectures – 28 Practicals - 28 Total – 56

2. Objectives:

Give the students a dynamic perspective of the concepts of parasitism to gradually prepare them to other scientific areas such as Clinics, Animal Health and Production, Inspection of Animal Products and Veterinary Public Health through the study of parasites from domestic, wild and aquatic animals. Prepare the student to be able to execute lab techniques for parasitological diagnosis and to interpret obtained results.

3. Programme:

Theoretical: Generalities and basic concepts: the phenomenon of parasitism and aspects related to the parasite, the host and the host-parasite relationships. In relation to the parasite, concepts of biological types of association; types of parasitism; adaptation to the parasitic form; parasitic specificity; localization of parasites; ways of entry, dissemination and way out of parasites. The host will be defined under the classical and ecological sense, and characterized as of "high" and "low" risk and parasitic risk defined in terms of space and time. Parasitological and clinical periods of parasite development are considered in relation to diagnosis and the design of integrated methods of control. A specific study of Arthropoda, Pentastomida and Protozoa parasites of domestic, wild and aquatic animals and Man will be done.

Practical: Methods of collecting, preserving, sample preparing and detection of the presence of parasitic forms in animal blood, faeces, hair and skin samples. Identification of morphological structures from Arthropoda and Protozoa parasites with importance in Veterinary Medicine.

4. Bibliography:

- Power Point presentations at intranet (Moodle <http://moodle.fmv.ulisboa.pt> Parasitology I), on the whole subject of theoretical and practical classes.
- Zajac, A.M., Conboy, G.A., Little, S.E., Reichard, M.V. (2021). Veterinary Clinical Parasitology 9th Edition. Wiley Blackwell
- Bowman, D.D. (2014). Georgis' Parasitology for Veterinarians. 10th ed. W.B. Saunders Co., Philadelphia. ISBN: 978-1-4557-4006-2.
- Manual of Parasitology Practices (pdf) authored by the teachers, available on the intranet <http://moodle.fmv.ulisboa.pt> Parasitology I
- Guia de Parasitologia Veterinária (Aracnoentomologia e Protozoologia) FMV/ULisboa. Isabel Pereira da Fonseca et al. 2016. <http://atlasparasitologia.fmv.ulisboa.pt/>
- Recommended scientific papers available at intranet (Moodle) and European Scientific Counsel Companion Animal Parasites site <https://www.esccap.org/>
- Cordero del Campillo, M., Rojo Vázquez, F..A. (1999) - Parasitologia Veterinaria. McGraw-Hill, Interamericana, Madrid, 968 pp. ISBN: 978-8-4486-0236-9.
- Taylor, M. A. (2015). Veterinary Parasitology / M.A. Taylor, R.L. Coop, R.L. Wall. 4th edition, Wiley Blackwell, Chichester. ISBN 978-0-470-67162-7.

5. Assessment:

Written test (combination of true or false questions, filling spaces with correct terms and short answer) plus practical test (arthropods and protozoa parasites identification followed by a brief discussion). Final classification results from marks obtained in written and laboratory tests (minimum 10 in each) and continuous evaluation (attendance, interest and participation in class).