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, Alexandre Leitão

1. Contact hours: **Lectures – Theoretical - 28; Practical – 28.Total – 56**

2. Objectives:
Provide students with a dynamic perspective on the concepts of parasitism to progressively prepare them for other scientific fields such as clinical, animal health and production, animal product inspection and veterinary public health through the study of parasites of domestic, wild and aquatic animals. To prepare students to carry out laboratory techniques for parasitological diagnosis and to interpret the results obtained.

3. Programme:
Theoretical: Generalities and basic concepts: the phenomenon of parasitism and aspects relating to the parasite, the host and the host-parasite relationship. In relation to the parasite, concepts of biological types of association; types of parasitism; adaptation to the parasitic form; parasitic specificity; localisation of parasites; routes of entry, spread and exit of parasites. The host is defined in the classical and ecological sense and characterised as "high" and "low" risk, and the parasitic risk is defined in terms of space and time. Parasitological and clinical periods of parasite development will be considered in relation to diagnosis and the design of integrated control methods. A specific study of Arthropoda, Pentastomida and Protozoa parasites of domestic, wild and aquatic animals and humans will be carried out.
Practical: Methods of collection, preservation, sample preparation and detection of parasitic forms in animal blood, faeces, hair and skin samples. Identification of morphological structures of arthropod and protozoan parasites relevant to 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, Willey Blackwell, Chichester. ISBN 978-0-470-67162-7.

5. Assessment:
Written test (combination of true/false questions, fill-in-the-blank and short answer) and practical test (identification of arthropods and protozoan parasites followed by a short discussion). Final classification will be based on the marks obtained in the written and practical tests (minimum of 10 in each) and continuous assessment (attendance, interest and participation in class).