

## REPRODUCTION AND OBSTETRICS I

**Study programme: MIVM Curricular Year: 4<sup>st</sup> Semester: 7<sup>nd</sup> ECTS: 5**

**Lecturer(s):** Luís Lopes da Costa (CCP), Luisa Mateus (R), Ana Catarina Torres, Elisabete Silva

**1. Contact hours:** Lectures - 26 Praticals - 39 Total - 65

**2. Objectives:** After completion of the discipline, students should be familiar with the basic knowledge and skills concerning the reproductive processes, the collection and assessment of semen, the methods of diagnosis of the stage of the oestrous cycle and of pregnancy and the diagnostics and therapy of reproductive diseases of companion and equine animals.

### 3. Programme:

**Theoretical - CANINE AND FELINE:** Reproductive and oestrous cycle; Breeding management; contraception and pregnancy termination; Pregnancy, pregnancy diagnosis, pregnancy loss and abortion; Parturition and care of the neonates; Diseases of the puerperal period: retention of foetal membranes, sub-involution of placental sites, metabolic dysfunction, mastitis, agalactia and puerperal metritis; Diseases of oestrous cycle: vaginites, endometrial hyperplasia/pyometra complex, Hyperestrogenism; infertility/subfertility in the female and male; Male pathology: balanopostitis, orchitis, testicular tumors, prostatic diseases.

**EQUINE:** Reproductive cycle and factors of seasonal reproduction; Breeding management and control of reproduction; Artificial insemination and embryo transfer; Diagnosis of pregnancy and problems of pregnancy; Parturition, care of the neonate and dystocia; Reproductive diseases and infertility in the mare; Management of the stallion and reproductive problems of the stallion.

**Practical - CANINE AND FELINE:** Breeding soundness evaluation of the male dog and tom cat; Gynecological examination in the bitch and queen; Technique of artificial insemination in the bitch; Interpretation of vaginal smears and blood progesterone in the bitch; Discussion of clinical cases; **EQUINE:** Physical evaluation, Semen collection and evaluation in the horse; Gynecological examination of the mare; Cytology and uterine biopsy in the mare; Semen processing, storage and manipulation; Discussion of clinical cases.

### 4. Bibliography:

- Material policopiado/digital das apresentações das aulas teóricas e guiões das aulas práticas.
- Ettinger's Textbook of Veterinary Internal Medicine. 9th edition, 2023, Elsevier. Editors: Ettinger S J.; Feldman E C.; Cote E. (Volume 1&2) ISBN: 9780323779289
- Canine and Feline Theriogenology. 2001, Saunders. Editors: Shirley Johnston, Margaret Kustritz, Patricia Olson. ISBN: 0721656072
- Veterinary Reproduction & Obstetrics, 10th Edition, 2019, Elsevier. Editors: David Noakes, Timothy Parkinson, Gary England. ISBN: 9780702072338
- Equine Reproduction. 2<sup>nd</sup> Edition, 2011, Wiley-Blackell. Editors: Angus Mckinnon, Edward L. Squires, Wendy E. Vaala, Dickson D. Varner (Volume 1&2). ISBN: 9780813819716

### 4. Assessment:

The final assessment will cover the theoretical and practical component through a written examination of 2 hours and 30 minutes including short answers questions based on clinical cases, multiple-choice questions and T&F questions. Each part (Equines and Companion Animals) is quoted with 10.0 values, with a minimum of 4.0 values in each. The approval in the exam is obtain with  $\geq 9.5$  out of 20 values.