

ANATOMY OF REPRODUCTIVE SYSTEM

This module aims to provide an in-depth understanding of the anatomy of the reproductive system, focusing on the relationship between the structure and function of the female reproductive system in domestic animals and humans. Using the animal model, the student will acquire the necessary techniques to assess reproductive structures; in particular, those of the ovaries and female gamete.

The course will cover five topics:

- macroscopic anatomy and topographic relationships of the female reproductive organs;
- cellular/tissutal organization of the uterus and fallopian tubes;
- microscopic anatomy of the structures contained within the gonad and the female gamete of domestic animals and women;
- correlation between ovarian follicle growth and angiogenesis in the follicular wall;
- basic methodologies for morphological analysis, isolating ovarian follicles and oocyte by light microscopy and transmission/scanning electron microscopy (colour topographical, immunohistochemistry, immunocytochemistry in optical microscopy and electron microscopy, molecular hybridization in situ, vascular corrosion cast, etc.)

The module is divided into three units:

1. comparative gross anatomy of the female reproductive system (ovaries, fallopian tubes and uterus) in domestic animals and women;
2. study and analysis of the uterine tubes and the microscopic anatomy of the uterus in domestic animals and women;
3. study, microscopic analysis and applied methodologies of the ovaries and the evaluation of the female gamete in domestic animals and women.

These units structure both the lectures and the theoretical/practical lessons. The latter are undertaken in laboratories where students will have autonomous use of dedicated equipment.

There are tests at the end of each unit to assess the students' learning level, and a final oral examination.