



VETE1250 Embryology of Domestic Animals

[30h+15h exercises] 5 credits

This course is taught in the 1st semester

Teacher(s): André Moens, René Rezsohazy

Language: French
Level: First cycle

Aims

The objective of this course is to teach the basic processes involved in the embryonic development of mammals and to present a comparative study of the differentiation of the tissues and organs of our domestic animals, mammals and birds. This knowledge is crucial to study efficiently the anatomical and physiological aspects of a organ and to understand the origin and the consequences of congenital abnormalities. The functional and clinical aspects of this comparative embryology are particularly emphazised.

Main themes

The content of this course is divided into two parts:

1) The embryonic period (or embryogenesis) that covers the gametogenesis (production of matured oocytes and spermatozoa), the fertilization, the preimplantation development, the implantation and the placentation in mammals. A comparative study is made for the more important clinical aspects of these processes and a whole chapter is devoted to the experimental and applied biotechnologies of the mammalian gametes and embryos. A short comparison is made with the bird's embryonic development. 2) The fetal period (or organogenesis) consisting of the differentiation and transformation of isolated organs and anatomical systems in our domestic species.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisite: a good knowledge of basic biology and zoology

Complete illustrated notes can be purchased. All recommended books of general and clinical embryology are available in the veterinary Unit.

Practical activities consisting of dissection of mammalian fetuses (dog, cat, bovine, mouse) are organized to illustrate the theorical concepts.

Other credits in programs

VETE12BA Deuxième année de bachelier en médecine vétérinaire (5 credits) Mandatory