

LVETE1250

2013-2014

Embryology of Domestic Animals

4.0 credits	30.0 h + 4.0 h	1q

Teacher(s):	Moens André ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	A good knowledge of the elementary zoology and the biology is absolutely necessary
Main themes :	The course is divided into two parts: - The embryonic period consists of gametes production, fertilization and the embryo development until its implantation in the domestic mammal species as well as the different types of placentation. The embryonic development of the bird embryo is also envisaged. An important chapter on the biotechnologies of the mammalian embryo ends this first part. - The fetal period consists of the development of the various organs and systems as well as their abnormalities of development observed in our domestic species (horse, bovine, carnivores, pig and hen).
Aims:	Understand the basic processes involved in the embryonic development and the differentiation of tissues, organs and systems of organs of our domestic mammals and the bird. That knowledge will help the student to understand more efficiently the anatomical and physiological aspects of the adult animal and the origin of the congenital abnormalities. The accent is put on the aspects more particularly important for the veterinary practice. The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".
Evaluation methods :	Oral exam with 45 minutes of preparation
Teaching methods :	Oral lecture by the professor Presentation with transparencies The practical activities (4 hours) concern the dissection of fetuses of pets and farm animals (bovine, dog, cat, rabbit) and of their fetal membranes. The supervision is made by the professor and the assistant
Content :	Study of gametogenesis, preimplantation development, placentation and the development of the main organs anlage Study of the development of the organs of the various systems (digestive, respiratory, uro-genital, vascular, nervous and locomotive)
Bibliography :	More than about twenty books available for consultation at the professor The two main references are: 1) Lehrbuch der Embryologie der Haustiere. Rüsse und Sinowatz. Ed. Paul Parey Veterinary Embryology. McGeady, Quinn, FitzPatrick and Ryan Ed Blackwell Publishing
Cycle and year of study :	> Bachelor in Veterinary Medicine
Faculty or entity in charge:	VETE