

8.0 credits

45.0 h + 60.0 h

1q

Teacher(s) :	Gofflot Françoise ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	Concepts of animal cell biology (VET1295), anatomy of domestic animals (LVET1241), general histology (LBIO1232A) and immunology (LBIO1335).
Main themes :	Within the body, the different tissues are composed of specific structures and specialized cells that assemble to form organs, which will ultimately participate to the major functional systems of the animal. In this course, we will study in detail the morphological and functional characteristics of the main functional systems of the body, namely the cardiovascular, integumentary, lymphatic, digestive, respiratory, urinary, reproductive and endocrine systems. We will also tackle the central nervous system and the senses organs.
Aims :	This course is built upon and extends the concepts acquired in the course of 'general histology' (LBIO1232A). It is aimed to provide veterinary students with a panorama of organs' histology and functions in correlation with the course of 'animal physiology'. The emphasis is put on the histology of domestic animals and on comparative aspects among different species. The histological analysis is more or less detailed according to the importance of the physiological and biochemical processes which take place in the studied tissue, and depending on the clinical and pathological significance of the system. <i>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".</i>
Evaluation methods :	Theoretical concepts are evaluated during an oral examination by two opened questions concerning two different systems studied in the course. The evaluation of histological sections takes place the same day and is also an oral examination. Using a light microscope, the student will have to identify and characterize cells, tissues and organs on similar histological preparations as those observed during the practical exercises.
Teaching methods :	The teaching involved ex cathedra lectures using powerpoint presentations and blackboard drawings, illustrating the different studied systems with photomicrographs of histological sections and with diagrams. During practical exercises, histological sections of the different organs envisaged in the lectures are available to students for analysis on light microscope, in order to observe the key features of cells and tissues and their assemblage into organs. Each session of practical exercises begins with an evaluation of the concepts studied in the previous session, and this evaluation is included in the final note.
Content :	1- Introduction: main concepts and overview of methods 2- Cardiovascular system 3- Integumentary system 4- Lymphatic system 5- Digestive system 6- Respiratory system 7- Urinary system 8- Male reproductive system 9- Female reproductive system 10- Endocrine system 11- Central nervous system 12- Sense organs (Eye, Ear)
Bibliography :	Reference Atlas : - Atlas d'Histologie Fonctionnelle de Weather, Eds Young, Lowe, Stevens and Heath, De Boeck 2008 (traduction 5e édition anglaise) Other resources: - Textbook of Veterinary Histology, Ed Samuleson, Saunders Elsevier 2007 - Histologie et Biologie Cellulaire, Ed Kierszenbaum, de Boeck 2006 - Histologie, Ed Lullman-Rauch, de Boeck 2008 - Histology: a text and atlas, Eds Ross and Pawlina, Lippincott Williams and Wilkins, 2011
Other infos :	The presence in practical class is compulsory. Any unjustified absence will be sanctioned.
Cycle and year of study :	> Bachelor in Veterinary Medicine

Faculty or entity in charge:	VETE
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