UCLouvain

lvete1390

2022

Histologie spéciale et des animaux domestiques

8.00 credits	45.0 h + 60.0 h	Q1

Teacher(s)	Gofflot Françoise ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	Recommended knowledge of the notions of anatomy of internal organs, molecular biology and immunology to understand the animal histology course Essential knowledge of the basic notions of histology to understand the animal histology course *The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
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.
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 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.
Evaluation methods	The evaluation aims to assess the mastery of essential learning outcomes of each of the two parties. Consequently, the successful completion of the theoretical part and the practical part is essential to demonstrate the competences and knowledge defined in the learning outcomes of the teaching unit. A failing grade for the theoretical or practical part leads to a failing grade for the entire course. In the final grade, the theoretical part is worth 12/20 and the practical part is worth 8/20. The theoretical exam is an oral examination with two open questions concerning two different systems studied during the year. The student's ability to make connections between the different chapters as well as his/her reasoning ability will be part of the evaluation. The practical work exam is also an oral examination. The student should be able to identify, locate and name cells, tissues and organs on histological preparations similar to those observed during the year. Students are also asked to make connections between systems.
Teaching methods	**The teaching methods aim to achieve learning outcomes by implementing two approaches to acquire distinct and complementary skills.** **T he theoretical approach** aims 1) to describe the composition and organization of the different types of tissues/ cells present within the organs in the different systems and 2) to link the topographical, histological and physiological characteristics of the organs necessary for the understanding their function and the subsequent study of their lesions. It involves *ex cathedra* lectures, with powerpoint projections and blackboard drawings, illustrating the different systems with pictures of histological sections or diagrams. In each chapter, some sections are studied by the students in self-learning. A continuous formative evaluation is implemented, thanks to Tests/Quiz accessible on Moodle at the end of each chapter. **The practical approach** aims to identify the different types of tissues/cells, using the adequate vocabulary and to complete the knowledge acquired during the theoretical course, through the microscopic observation of the different organs. During practical work sessions, histological preparations of the various organs considered in the theoretical course are made available to students to observe the tissue organization, cell morphology and the interrelationships between the tissues within the organ. Before each session, the students prepare the labs by watching the corresponding powerpoint in self-learning. In addition, each practical begins with a formative evaluation on the preparation of the day's session.
Content	The course is organized into 11 chapters that review the major systems of the organism 1- Cardiovascular system

	2- Integumentary system 3- Lymphatic system 4- Digestive system 5- Respiratory system 6- Urinary system 7- Male reproductive system 8- Female reproductive system 9- Endocrine system 10- Sense organs (Eye, Ear) 11- Central nervous system
Bibliography	Atlas de référence : - Atlas d'Histologie Fonctionnelle de Weather, Eds Young, Lowe, Stevens and Heath, De Boeck 2008 (traduction 5e edition anglaise) Autres sources: - 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	Attendance at practical work is compulsory. Teachers may, under article 72 of the General Regulations for Studies and Examinations, propose to the jury to oppose the registration of a student who has not attended the various sessions of the TPs (without justificatives), during the January/June or September session.
Faculty or entity in charge	VETE

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Veterinary Medicine	VETE1BA	8	LBIO1234	🔍