

Liverpool John Moores University

Title: Animal Anatomy and Pathology
Status: Definitive
Code: **4505YAUZOO** (127937)
Version Start Date: 01-08-2021

Owning School/Faculty: Biological and Environmental Sciences
Teaching School/Faculty: Yunnan Agricultural University

Team	Leader
Rachael Symonds	Y

Academic Level: FHEQ4
Credit Value: 10
Total Delivered Hours: 80
Total Learning Hours: 100
Private Study: 20

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	76

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Written exam covering lecture material for animal anatomy	35	2
Exam	Written ex	Written exam covering lecture material for animal pathology	30	2
Test	Test	Test covering animal pathology material	17	
Test	Test	Test covering animal anatomy material	18	

Aims

Animal anatomy and pathology is the science of studying animal body structure and structural laws at the organ level and then gaining an understanding of the pathology and disease that affect these structures. Students will study the functions of animal

organs, external shapes, relative positions and projection positions, internal morphological structures (internal anatomical structures), and organ structural laws. Students will then gain an understanding of the occurrence of disease in animals, metabolic and morphological structure change and its causes and mechanism. Students will gain an understanding of the causes of disease, disease occurrence, development and outcome, timing of diseases, diagnosis and treatment for diseases and gain the skills to solve problems related to the process of the diagnosis in the, and have the ability to diagnose disease.

Learning Outcomes

After completing the module the student should be able to:

- 1 Ability to analyze disease occurrence, development and progression and master the nature, basic contents and research methods of animal pathology, as well as an introduction to etiology and pathogenesis.
- 2 Master the concepts of various local blood circulation disorders and atrophy, degeneration and necrosis, as well as the pathological changes and their effects on the body, and be able to recognize the ocular and histopathological changes of various injuries such as atrophy, degeneration and necrosis.
- 3 Master various forms and processes of adaptation and repair, the concept of inflammation, basic pathological changes, types, and ocular morphological characteristics of common tumors.
- 4 Master the concepts, causes and types of common pathophysiological processes such as water and electrolyte metabolism disorders, acid-base balance disorders, fever, shock, disseminated intravascular coagulation, hypoxia, stress, and immunopathology, and be capable of analyzing the compensatory regulation of the body when dehydration and acid-base balance disorders occur
- 5 Ability to identify mammalian and poultry body parts and identify common animal organs in vitro.
- 6 Ability to determine the position of the main organs of common animals in the body and identify the internal morphology.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Written exam	1	6	5			
Written exam	1	2	3	4	6	5
Test	1	6	5			
Test	1	2	3	4	6	5

Outline Syllabus

The main teaching content of this course includes: knowledge about experimental animal welfare. Animal body structure, names and divisions of parts of mammals and birds. The functions of the main organs of 11 common animals such as pigs (claw-hoofed omnivores), cows and sheep (claw-hoofed ruminants), horses and donkeys

(unique hoofed herbivores), dogs and cats (carnivores), chickens and ducks (poults), and their external forms , Internal morphology, location in the body, and interrelationships between organs. The position of body surface projections of common internal organs in animals. The course will then explore the concept and characteristics of disease, the type of etiology, the general rules of disease occurrence, development and prognosis; Basic pathological processes that can occur in various diseases include blood circulation disorders, cell and tissue damage, adaptation and repair, and inflammation. Tumor; The concept, mechanism, pathological change, outcome and effect of edema on organism; The concept and type of dehydration, the compensation of the body during dehydration and the principle of rehydration; Acid-base balance disorder fever, shock, disseminated intravascular coagulation, hypoxia, stress, immunopathology concept, cause, type, impact on the body; The specific pathological processes of important organs and systems.

Learning Activities

This course is mainly based on classroom teaching, supplemented by teaching methods such as image recognition and drawing, discussion and self-study.

Notes

Through undergraduate study, students majoring in animal medicine will understand and master the basic theories and knowledge of basic anatomy of animals and organs, pathological processes and disease pathology, and be able to correctly apply these theories and knowledge to analyse and solve clinical practical problems, thus laying a good foundation for subsequent specialised courses.