

# **Animal Anatomy and Pathology**

## **Module Information**

**2022.01, Approved** 

## **Summary Information**

Module Code	4505YAUZOO
Formal Module Title	Animal Anatomy and Pathology
Owning School	Biological and Environmental Sciences
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 4
Grading Schema	40

#### **Teaching Responsibility**

LJMU Schools involved in Delivery	
LJMU Partner Taught	

### **Partner Teaching Institution**

Institution Name	
Yunnan Agricultural University	

## **Learning Methods**

Learning Method Type	Hours
Lecture	76

## Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

## **Aims and Outcomes**

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.

#### After completing the module the student should be able to:

#### **Learning Outcomes**

Code	Number	Description
MLO1	1	Ability to analyse disease occurrence, development and progression and master the nature, basic contents and research methods of animal pathology, as well as an introduction to aetiology and pathogenesis.
MLO2	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.
MLO3	3	Master various forms and processes of adaptation and repair, the concept of inflammation, basic pathological changes, types, and ocular morphological characteristics of common tumours.
MLO4	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 analysing the compensatory regulation of the body when dehydration and acid-base balance disorders occur
MLO5	5	Ability to identify mammalian and poultry body parts and identify common animal organs in vitro.
MLO6	6	Ability to determine the position of the main organs of common animals in the body and identify the internal morphology.

### **Module Content**

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. Tumour; 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.
Module Overview	
Additional Information	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.

## **Assessments**

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Exam	Written exam 1	35	2	MLO1, MLO5, MLO6
Exam	Written exam 2	30	2	MLO1, MLO2, MLO3, MLO4, MLO5, MLO6
Test	test 1	17	0	MLO1, MLO5, MLO6
Test	Test 2	18	0	MLO1, MLO2, MLO3, MLO4, MLO5, MLO6

## **Module Contacts**

### **Module Leader**

Contact Name	Applies to all offerings	Offerings
Rachael Symonds	Yes	N/A

### **Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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