

## Overview

<b>Programme Code</b>	46431
<b>Programme Title</b>	Animal Medicine (Zoology)
<b>Awarding Institution</b>	Liverpool John Moores University
<b>Programme Type</b>	Degree with Foundation
<b>Language of Programme</b>	All LJMU programmes are delivered and assessed in English
<b>Programme Leader</b>	
<b>Link Tutor(s)</b>	Rachael Symonds

<b>Partner Name</b>	<b>Partnership Type</b>
Yunnan Agricultural University	Dual

## Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Science with Honours (Fnd) - BSHF	See Learning Outcomes Below
Alternative Exit	Certificate of Higher Education (Fnd) - CHEF	Recall acquired knowledge, facts and procedures of basic concepts and principles relating to animal medicine (zoology). Recall acquired knowledge, facts and procedures of basic concepts and principles relating to animal medicine (zoology). Explain key concepts in animal medicine ( zoology) and processes and interpret scientific data. Explain key concepts in animal medicine ( zoology) and processes and interpret scientific data. Operate in a range of scientific contexts related to animal medicine (zoology) and take responsibility for their contributions and outputs. Operate in a range of scientific contexts related to animal medicine (zoology) and take responsibility for their contributions and outputs.
Alternative Exit	Diploma of Higher Education (Fnd) - DHEF	Apply a broad knowledge base, both theoretical and practical, to determine solutions to a range of scientific problems relating to animal medicine (zoology). Critically analyse information, demonstrating significant judgement across a range of animal medicine (zoological) areas. Accept responsibility for determining and achieving personal and/or group outcomes .

Alternate Award Names

## External Benchmarks

Subject Benchmark Statement
UG-Biosciences (2019)

## Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	September	Yunnan Agricultural University	4 Years

## Aims and Outcomes

### Educational Aims of the Programme

To provide for all students a defined academic programme of study with clear learning outcomes through diverse learning and teaching methods, and assessment strategies. To provide students with a wide knowledge and understanding of core subject matter to enable them to pursue a career in animal medicine (zoology) related employment. To enable students to acquire a high level of practical, analytical, surgical and research skills in animal medicine (zoology). Encourage students to develop critical, analytical problem-based learning, and transferable skills to prepare the student for graduate employment. To develop a familiarity biological information technology, and develop communication, analytical and reflective skills necessary to enable students to undertake independent study, and to participate in professional development and lifelong learning. Enhance graduate employability by providing students with the knowledge, skills required to gain careers in animal medicine or other areas that demand well developed critical thinking, professional practical, analytical and transferable skills.

### Learning Outcomes

Code	Description
PLO1	Evaluate, utilise and present fundamental facts, concepts, principles and theories of animal medicine (zoology) through the study of molecular, cellular, physiological and anatomical processes, genetics, evolution and behaviour of animals.
PLO2	Develop an ability to analyse, synthesise and summarise information, including published research or reports, in a critical manner.
PLO3	Apply knowledge and skills of animal medicine (zoology) to address unfamiliar scenarios.
PLO4	Obtain and integrate several lines of evidence to formulate and test hypotheses.
PLO5	Design, plan, conduct and report on investigations, which may involve primary or secondary data.
PLO6	Obtain, record, collate and analyse data using appropriate techniques in practice or laboratory settings, working individually or in a group, as is most appropriate for the subject under study.
PLO7	Undertake practical and/or laboratory investigations of animals in a responsible, safe and ethical manner.
PLO8	Use and interpret a variety of sources of scientific information: textual, numerical, verbal and graphical.
PLO9	Prepare, process, interpret and present scientific data, using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets and programmes for presenting data visually.
PLO10	Communicate scientific information effectively in written, verbal and visual forms to varied audiences.
PLO11	Cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not.
PLO12	Demonstrate competence and progressive development in the basic and core experimental and practical skills appropriate to the study of animal medicine (zoology).
PLO13	Use the internet and other electronic technology critically as a means of communication and a source of information.
PLO14	Develop the skills necessary for independent lifelong learning e.g. working independently, time management, organisational and team working skills.

<b>Code</b>	<b>Description</b>
PLO15	Identify and work towards targets for personal, academic, professional and career development.
PLO16	Recognise and discuss the complexity and diversity of animal anatomy, form and function.
PLO17	Develop an understanding of the ethical and other issues relating to animal welfare and demonstrate familiarity with veterinary and animal research laws and welfare regulations.
PLO18	Recognise the moral and ethical issues of investigations and appreciate the need for ethical standards and professional codes of conduct.
PLO19	Develop a systematic and analytical approach to solving problems.
PLO20	Demonstrate the ability to understand animal clinical diagnosis and treatment and management and prevention and control of animal diseases.
PLO21	Discuss the interdisciplinary nature and professional application of animal medicine (zoology).
PLO22	Recognise and apply zoological theories, paradigms, concepts or principles.

## Programme Structure

### Programme Structure Description

<b>Programme Structure - 480 credit points</b>	
<b>Level 3 - 120 credit points</b>	
<b>Level 3 Core - 120 credit points</b>	<b>CORE</b>
[MODULE] 3501YAUGEN Anatomy and Physiology Approved 2022.01 - 20 credit points	
[MODULE] 3501YAUZOO Fundamentals of Zoology Approved 2022.01 - 20 credit points	
[MODULE] 3502YAUGEN Skills and Presentations Approved 2022.01 - 20 credit points	
[MODULE] 3502YAUZOO Animal Physiology and Biochemistry Approved 2022.01 - 20 credit points	
[MODULE] 3503YAUZOO General Mathematics Approved 2022.01 - 20 credit points	
[MODULE] 3504YAUZOO General Chemistry Approved 2022.01 - 20 credit points	
<b>Level 4 - 120 credit points</b>	
<b>Level 4 Core - 120 credit points</b>	<b>CORE</b>
[MODULE] 4501YAUGEN Fundamentals of Scientific Research Approved 2022.01 - 20 credit points	
[MODULE] 4501YAUZOO Microbiology and Immunology Approved 2022.01 - 20 credit points	
[MODULE] 4502YAUGEN Biochemistry Approved 2022.01 - 20 credit points	
[MODULE] 4502YAUZOO Molecular Biology and Pharmacology Approved 2022.01 - 20 credit points	
[MODULE] 4503YAUZOO Experimental Techniques Approved 2022.01 - 20 credit points	
[MODULE] 4504YAUZOO Professional training: laboratory Skills in Animal Medicine Approved 2022.01 - 10 credit points	
[MODULE] 4505YAUZOO Animal Anatomy and Pathology Approved 2022.01 - 10 credit points	
<b>Level 5 - 120 credit points</b>	
<b>Level 5 Core - 120 credit points</b>	<b>CORE</b>
[MODULE] 5501YAUGEN Research Methods Approved 2022.01 - 20 credit points	
[MODULE] 5501YAUZOO Genes and Genomes Approved 2022.01 - 20 credit points	
[MODULE] 5502YAUZOO Disease and Infection Control Approved 2022.01 - 20 credit points	
[MODULE] 5503YAUZOO Animal Quarantine and Drug Residue Detection Approved 2022.01 - 20 credit points	
[MODULE] 5504YAUZOO Surgery, Internal Medicine and Small Animal Diseases Approved 2022.01 - 10 credit points	
[MODULE] 5505YAUZOO Professional Training: Clinical Experiments Approved 2022.01 - 10 credit points	
[MODULE] 5506YAUZOO Epidemiology and Pathological Diagnostic Techniques Approved 2022.01 - 20 credit points	
<b>Level 6 - 120 credit points</b>	
<b>Level 6 Core - 120 credit points</b>	<b>CORE</b>
[MODULE] 6501YAUGEN Dissertation-Research Project Approved 2022.01 - 40 credit points	
[MODULE] 6501YAUZOO Current Topics in Zoology Approved 2022.01 - 20 credit points	
[MODULE] 6502YAUZOO Applications of Genetics in Health and Disease Approved 2022.01 - 20 credit points	
[MODULE] 6503YAUZOO Animal Hygiene and Health Approved 2022.01 - 20 credit points	
[MODULE] 6504YAUZOO Obstetrics Approved 2022.01 - 10 credit points	
[MODULE] 6505YAUZOO Animal Infectious Disease prevention and Control Approved 2022.01 - 10 credit points	

## Teaching, Learning and Assessment

Knowledge and understanding is promoted through a range of diverse taught sessions including lectures, computer based sessions, workshops, practical laboratory sessions and clinical and surgical sessions, problem based learning and independent study. Knowledge and understanding are assessed in a variety of ways including: written examinations, oral examinations, laboratory and experimental reports, essays and critical reviews, data analysis, case studies, seminar and poster presentations. Intellectual skills, are developed though all levels of the program. For example, applying theories and concepts; analysing and synthesising information critically; integrating evidence; applying knowledge and recognition of moral and ethical issues are developed in all modules with an increasing emphasis through the levels of the programme and culminate in the level 6 Research Project. Written exams, laboratory reports, A range of examination questions (e.g. essays, interpretative questions) and a wide variety of coursework including: laboratory and fieldwork reports; critical reviews; data analysis and interpretation exercises; seminar and poster presentations, assess ability for these intellectual skills. Practical and professional skills are taught during laboratory sessions, during visit and practice sessions at the onsite animal teaching hospital and in workshops. Core principles and minimum standards of practical work are introduced at level 3 and 4, and are further developed through level 5 where more specialist skills are also introduced. The Research Project in level 6 introduces an opportunities for students to apply these practical skills independently. These core practical and professional skills are assessed through written exams, practical reports, on the spot tests and assessment of practical laboratory skills. Transferable and key skills are inherent within the programme, but specifically they are taught in core modules at all Levels (Skills and Presentations at Level 3; Fundamentals of Scientific Research at Level 4; Research Methods at Level 5, and the Research Project at Level 6). These transferable and key skills are assessed through assessment activities at all levels, in all modules and specifically in the modules mentioned above.

## Opportunities for work related learning

Practical teaching is an important part of this program. Therefore this program will ensure that the practical component accounts for greater than 30% of the total teaching hours, which is mainly implemented through the following specific links: 1. Curriculum experiments: the vast majority of professional courses occupy approximately 1 / 3 experimental content, ensuring the combination of theory and practice. 2. In- school practice: in addition to the general scientific research facilities available at YAU such as the Agricultural Science Centre, the College of Veterinary Medicine also has our own scientific research facilities such as the veterinary medicine experimental teaching centre, which is of more than 2000 square meters, an Animal teaching hospital of more than 3000 square meters, Provincial key laboratory of Banna minipig inbreeding strain and other research platforms. These facilities can provide strong guarantee for the students ability to carry out veterinary clinical practical teaching and learning as well as the final year research project. 3. Off-site visit and practice: a certain proportion of the off-site visit and practice is designed as follows: at present, there are more than 10 off-campus practical teaching bases (farms and vet clinic), which will guarantee the student visits and practice. 4. Research Project: In this programme, LJMU staff will provide online and remote guidance for the Research Project of the students, which lasts throughout the fourth academic year.

## Entry Requirements

Type	Description
Other international requirements	Students will be recruited from the National Entrance Examination (Gao Kao). Minimum requirement for English must be 90 out of 150 for the exam in Gao Kao.

## Extra Entry Requirements