Date: 26-01-2020

Extended Degree Veterinary Bioscience

UCAS code	XD03
Institution code	H12
Duration	5 years
Start date	September 2020
Location	Harper Adams University campus (and location of work placement)

Extended degree programmes are a means of accessing degree study should you not meet the entry requirements for honours degree programmes.

The extended degree in Veterinary Bioscience (Veterinary Science Pathway 1) provides a preparatory year for students hoping to progress to veterinary bioscience, veterinary nursing or veterinary physiotherapy degrees.

The extended degree in Veterinary Bioscience (Veterinary Science Pathway 2) provides a preparatory year for students hoping to transfer to the Bachelor of Veterinary Medicine and Surgery (BVetMS) degree.

Candidates will be assessed at the end of their first year of study and progress to either an ordinary degree (BSc Veterinary Bioscience only), Honours Degree (BSc Hons) or transfer onto BVetMS if on Pathway 2. Progression will be based on prior qualifications, preparatory year performance and for some routes a fitness to practice assessment.

Entry requirements

To study on pathway 1 you must be at least 17½ years old and have six GCSE passes at grade C/4 or above, to include English language, maths and science (or 5 GCSE passes at grade C/4 or above, to include English language, maths and science if you also have a level 3 qualification such as A level or BTEC).

To study on pathway 2 you must be at least 17½ years old and you must have a minimum of five GCSE passes at grades A/7 or above including Science and Additional Science (or Biology and Chemistry), with at least a grade B/6 in English Language, Mathematics and Physics (if taken as a separate GSCE).

The required GCSEs must be completed prior to application.

In addition to this applicants will also need to have achieved AAB at A level (or equivalent) including A2 Biology or Chemistry at grade A, plus an another science to be eligible to study the modules in pathway 2, which will enable suitable applicants to transfer onto the BVetMS Veterinary Medicine and Surgery course at the Harper and Keele Veterinary School upon completion of the course and meeting the eligibility criteria listed below. For a full list of the BVetMS Veterinary Medicine and Surgery entry requirements please visit the Harper and Keele Veterinary School website. The difference between entry requirements for this pathway and direct entry onto to BVetMS Veterinary Medicine and Surgery course is that the work experience is not required.

Suitable applicants for pathway 1 will be invited to attend an interview where they will be able to discuss their course choice in more detail, while applicants for pathway 2 will be required to take part in a selection event specifically for the BVetMS Veterinary Medicine and Surgery course.

Progression criteria

To continue onto BSc Veterinary Bioscience from this course, students will need to achieve the minimum pass mark of 40% overall.

To progress onto BSc (Hons) Veterinary Bioscience from this course, students will need to achieve at least 60% overall with no additional requirements.

To progress onto BSc (Hons) Veterinary Nursing from this course, through pathway 1, students will need to achieve at least 60% overall and have completed 4 weeks work experience in a Veterinary Practice. Students will also need to have completed a Fitness to Practice assessment prior to enrolment.

To progress onto BSc (Hons) Veterinary Physiotherapy from this course, through pathway 1, students will need to achieve at least 60% overall. Students will also need to have A2 Biology at grade C and completed at least 4 weeks relevant work experience prior to starting the course.

To transfer onto BVetMS Veterinary Medicine and Surgery at the Harper and Keele Veterinary School, students must complete pathway 2. From this course, students will need to achieve at least 75%.

A-level entry requirements

- **Entry requirements for 2020 entry are not currently available. Please contact Admissions for advice**

What will I study?

Year 1	
Information and Communication Technology (E3001C17)	15
Mathematics Applications and Statistics (E3002C17)	15
Academic Skills (R3001C17)	15
Readings in Applied Sciences (C3007C17)	15
Countryside Studies (C3002C17)	15
Biochemical Pathways	15
Introduction to Animal Biology (A3003C17)	15
Animal Management and Welfare (A3002C17)	15

Information and Communication Technology

Year of study 1
Code E3001C17
Credits 15
Core/option Core
Module contact Mrs Kath Leigh

This module develops your ability to use, adapt and apply ICT skills effectively to suit different purposes, through practical tasks. You need ICT skills, to use as a tool, to complete further studies and will, therefore, need to know how to find, develop and present information; recognise safe working practice; communicate effectively using electronic means; and manage files accurately.

You will:

- Manage data for easy retrieval and to minimise loss and demonstrate effective communication via electronic means.
- Design and develop structures and enter information; search for and find information; and integrate and present information using word processing software.
- Design and develop structures and enter information; search for and find information; and integrate and present information using presentation software.
- Design and develop structures and enter information; search for, find and develop information; and derive new information using spreadsheet software.

Mathematics Applications and Statistics

Year of study 1
Code E3002C17
Credits 15
Core/option Core

Numeracy skills are vital in Higher Education, and for future employment and life in general. Students on all Harper Adams' courses need the ability to process and interpret numerical data and present results effectively. This module aims to consolidate and improve these skills and improve your confidence in the use of mathematics. Some topics (percentages, statistics and graphs) link with the Information and Communication Technology module, being practised as spreadsheet exercises. The mathematical topics will be extensively applied to practical situations and higher education applications to facilitate achievement in your subsequent years of study.

You will:

- Select and apply mathematical principles to numerical, algebraic and analytical problems.
- Recognise and solve problems pertaining to space and shape applications.
- Recognise and solve problems pertaining to statistical and data handling problems.
- Recognise and solve problems pertaining to mechanical and accounting systems.

Academic Skills

Year of study 1
Code R3001C17
Credits 15
Core/option Core
Module contact Emma Tappin

This module provides a grounding in the essential academic skills required to be effective during university study. The module will offer you a swift insight into expectations the university has in relation to report writing, good and poor academic practice, referencing, presentations and time-management, along with insights into revision and examination techniques. These skills will be developed throughout this module and are relevant to all areas of study in higher education.

You will:

- Produce well-constructed, correctly referenced written material using appropriate sources (e.g. journal articles, books and electronic sources).
- Demonstrate oral presentation techniques and effective use of visual aids.
- Develop the ability to give and receive feedback effectively.

Readings in Applied Sciences

Year of study 1
Code C3007C17
Credits 15
Core/option Core
Module contact Dr John Reade

Finding, reviewing, and evaluation sources of information are key skills associated with scientific study. This module is designed to allow students to develop their skills in these three areas. Via discussion, debate, and independent study, students will explore the sources by which information can be obtained, the academic value of information from a variety of sources, and the importance of identifying and evaluating the drives, agendas, and biases of a range of information sources. This will be accomplished through analysis of scientific, technical, and popular writing on a range of subjects.

Countryside Studies

Year of study 1
Code C3002C17
Credits 15
Core/option Core
Module contact Simon Irvin

The aim of this module is to provide and develop students' interest in the countryside, and give you a broad

introduction to ecology and to the different factors that may influence countryside decision making and management options. Consideration will be given to pertinent legislation, site designations, land use and conservation organizations.

You will develop a basic understanding of the factors that influence land use in the UK, both urban and rural, and through field visits be exposed to the different types of land use found in the UK today.

The identification and management of key habitat types will enable you to understand and appreciate the importance of integrating environmental, economic and social issues to create a sustainable countryside.

You will:

- Discuss the concepts of ecology, conservation and climate change.
- Identify and discuss the different land uses and changes which have occurred in the British Countryside.
- Identify and discuss the importance of evolution, food webs and chains, and the balance of plant and animal populations.
- Identify the principles and concepts of habitat management and their application to wildlife and landscape conservation.

Biochemical Pathways

Year of study 1
Credits 15
Core/option Core

Please contact the course manager for details of this module.

Introduction to Animal Biology

Year of study 1
Code A3003C17
Credits 15
Core/option Core

This module will examine the fundamentals of Animal Biology applied to a range of domesticated animals, including companion animals, horses and livestock. The module will examine the structure and function of animal cells along with fundamentals of genetics and inheritance. The module provides the underpinning knowledge of animals' biology, including anatomy and physiology, essential for Animal, Veterinary Nursing or Agricultural degree programmes. Lectures will be supported by practical laboratory work.

You will:

- Recognise and understand the structure and function of animal cells and organelles including genetic material.
- Understand the physiological processes that occur within a mammalian body for a range of domesticated species, including companion animals, horses and livestock.
- Explain the relationship between structure and function of animal body systems.

Animal Management and Welfare

Year of study 1
Code A3002C17
Credits 15
Core/option Core

This module aims to give you an understanding and appreciation of the management and welfare of a range of animals including farmed animals and domestic pets. Topics covered will include the provision of resources to ensure optimum management, frameworks for assessing animal welfare and factors that can positively and negatively affect welfare in a range of animal species. It will be an essential module for students aiming to study further courses in animal health, welfare or management and veterinary nursing.

For students on the Animal Management and Welfare route it will complement the Introduction to Animal Biology module.

You will:

- Identify systems commonly used to house and manage a range of captive and domesticated animal species and the consequences of good and poor management.
- Explain what is meant by the term 'animal welfare', frameworks that exist for assessing welfare and relevant legislation.
- Apply the principles of animal welfare assessment to animals in a variety of captive/domestic situations including: intensively and extensively farmed; companions (dogs and cats); laboratories; entertainment (zoos and circuses) and the wild.

Pathway 1

Year 1	
Information and Communication Technology (E3001C17)	15
Mathematics Applications and Statistics (E3002C17)	15
Academic Skills (R3001C17)	15
Readings in Applied Sciences (C3007C17)	15
Countryside Studies (C3002C17)	15
Physiological Chemistry (A3008C17)	15
Introduction to Animal Biology (A3003C17)	15
Animal Management and Welfare (A3002C17)	15

Information and Communication Technology

Year of study 1
Code E3001C17
Credits 15
Core/option Core
Module contact Mrs Kath Leigh

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Academic Skills

Year of study 1
Code R3001C17
Credits 15
Core/option Core
Module contact Emma Tappin

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Readings in Applied Sciences

Year of study 1
Code C3007C17
Credits 15
Core/option Core
Module contact Dr John Reade

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scientific, technical, and popular writing on a range of subjects.

Countryside Studies

Year of study 1
Code C3002C17
Credits 15
Core/option Core
Module contact Simon Irvin

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- Identify the principles and concepts of habitat management and their application to wildlife and landscape conservation.

Physiological Chemistry

Year of study 1
Code A3008C17
Credits 15
Core/option Core
Module contact Dr Sandy Mackenzie

This module provides an introduction to biochemistry and biological molecules that are the building blocks of life. The use of this will develop an understanding of the structure and function of related biological macromolecules within an animal or plant and its environment. Enable students to understand both the similarities and differences in processes across plants and animals. This module will provide knowledge and understanding needed in a range of animal and applied science programmes which this supports, providing the material which may have been achieved by other students who have studied sciences at A level.

Introduction to Animal Biology

Year of study 1
Code A3003C17
Credits 15
Core/option Core

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Animal Management and Welfare

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Code A3002C17
Credits 15
Core/option Core

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Pathway 2

Year 1	
Veterinary Related Vocational Skills (Farm Animal) (A3009C17)	30
Veterinary Related Vocational Skills (Non-farm Animal) (A3010C17)	30
Academic Skills (R3001C17)	15
Readings in Applied Sciences (C3007C17)	15
Physiological Chemistry (A3008C17)	15
Global Issues and their Business Impact (R3003C17)	15

Veterinary Related Vocational Skills (Farm Animal)

Year of study 1
Code A3009C17
Credits 30
Core/option Core
Module contact Dr Leander McLennan

This modules aims to provide students with practical experience with the management of farm animals in the UK and the veterinary industry involvement with production animals. By the end of the module, students should be able to describe the various ways veterinary surgeons contribute to production animal health and welfare, public health and food safety, and reflect on the career options for vets in these industries. During the vocational elements of this module you will be in contact with veterinary practice clients. This will require you to act in a professional manner and assist you in developing these skills which will be required within later clinical study.

Veterinary Related Vocational Skills (Non-farm Animal)

Year of study 1
Code A3010C17
Credits 30
Core/option Core
Module contact Bethan Pinhey

A variety of different companion animal careers feed into the veterinary industry and it is important that future veterinary professionals have an understanding of these, as well as traditional clinical work. This module allows students to complete practical work experience in companion animal veterinary practice as well as in allied careers in order to support future career choices and development of work related skills. During the vocational elements of this module you will be in contact with veterinary practice clients. This will require you to act in a professional manner and assist you in developing these skills which will be required within later clinical study.

Academic Skills

Year of study 1
Code R3001C17
Credits 15
Core/option Core
Module contact Emma Tappin

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You will:

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Readings in Applied Sciences

Year of study 1
Code C3007C17
Credits 15
Core/option Core
Module contact Dr John Reade

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Physiological Chemistry

Year of study 1
Code A3008C17
Credits 15
Core/option Core
Module contact Dr Sandy Mackenzie

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Global Issues and their Business Impact

Year of study 1
Code R3003C17
Credits 15
Core/option Core
Module contact Mrs Rebecca Payne

This module aims to support the early development of critical thinking and synthesis by signposting students towards issues that will have a real and current impact upon businesses and their stakeholders.

You will be offered the opportunity to explore regional and global problems and their impact on the world's resources, the environment and human societies. You will spend much of your time later in your degree studies evaluating the impact of various political, economic, social, technological and environmental factors, both nationally and internationally in order to make judgements regarding the competitive environment within which businesses operate. This module underpins this progression and allows you an opportunity to explore the potential impact of identified and discussed issues without the requirement to develop solutions that fit a given business model.

The module is designed to give you an opportunity to explore and identify issues that may underpin organisational Corporate Social Responsibility (CSR) strategies you will study later in their degree programme.

You will:

- Summarise relevant sources of information on a pre-determined global issue.
- Identify key drivers of given dilemmas or challenges facing businesses.
- Present well-constructed and credible resources to communicate a viewpoint on a global issue in an engaging and appropriate format for the target audience.