



BSc (Hons) / BSc Animal Behaviour and Welfare (Top-up)

UCAS code	D328
Institution code	H12
Duration	1 year (full-time)
Start date	September 2019
Location	Harper Adams University campus

The course

This modular course offers FdSc/HND Animal Welfare and Management and HND Animal Care (or equivalent) students the opportunity to upgrade their qualification to an honours degree. It is linked closely to the established BSc (Hons) Animal Health and Welfare.

The key areas to be studied include Principles of Animal Behaviour, Behavioural Methodology and Applied Animal Behaviour. There are also specialist modules for both farm and companion animals in terms of behaviour and welfare. Graduates from this course would be well suited to careers as pet behaviour counsellors or animal welfare officers.

Entry requirements

- Top-up applicants must have achieved an average of 55% in their Foundation degree to apply for BSc non-honours and 60% to apply for BSc Honours.
- Applicants must have completed a full year's placement as part of their course of study or two years of full-time relevant employment after their course.

A-level entry requirements

- **Entry requirements for 2019 entry are not currently available. Please contact Admissions for advice**

Teaching and learning

Click module title to see full description.

Note: BSc (Hons) Year 2 is July-December only, and is a continuation of the Honours Research Project module started in year 1.

What will I study?

BSc (Hons) Top-up

Year 1	
Honours Research Project (HRPROJ)	30
Research Methods (Animals) (A5011C17)	15
Applied Companion Animal Health, Welfare and Behaviour (A6012)	15
Behavioural Methodology (A5015C17)	15
Integrated Health Management (A6021)	15
Options	
Advances in Equine Science (A6002C17)	15
Advances in Farm Animal Health and Welfare (A6018)	15

Honours Research Project

Year of study	1
Code	HRPROJ
Credits	30
Core/option	Core

To qualify for an honours degree a student must demonstrate the capacity for sustained, independent and high quality work. One of the most important vehicles for the demonstration of this capacity, and for developing the necessary skills, is the individual Honours Research Project. Each student will therefore be required to complete such a project under the general supervision of a member of staff and present the results in a project report and in a *viva voce* exam, with two tutors, which will also test to a high level, skills of communication and rational argument. This major exercise represents one-quarter of the final year studies and will therefore have an important influence on the classification of award.

Research Methods (Animals)

Year of study	1
Code	A5011C17
Credits	15
Core/option	Core
Module contact	Dr Stephen Mansbridge

The ability to collect, analyse and interpret data appropriately is a core skill for all those involved in modern animal science. In view of this, research skills are important to enable the critical appraisal of published research, and for the development of appropriate study designs to fulfil research objectives. This module forms part of the Professional Scholarship Programme (PSP) and is taken by all BSc and MSci students studying animal programs. The skills gained within this module are essential for the completion of the level 6 / 7 research projects in the final year. Students will learn valuable skills covering critical literature reviews, the importance of research designs and protocols in the context of quality assurance schemes, data

collection / analysis and presentation of information. By carrying out statistical analysis using appropriate software during tutorials, the students will develop their ICT skills and further their understanding of the role of statistics in the research process.

Applied Companion Animal Health, Welfare and Behaviour

Year of study 1
Code A6012
Credits 15
Core/option Core
Module contact [Mr Stephen Baugh](#)

This module is designed to provide a detailed knowledge of the factors involved in the aetiology and development of common diseases seen in companion animals (cats, dogs, small mammals, birds and reptiles) and develops the skills required to develop disease control and prevention strategies.

The behaviour of companion animal species will be considered, how these behaviours may be suppressed in domestic settings and how this may lead to the development of pathology and inappropriate or abnormal behaviours. The prevention and control of behavioural problems will also be considered.

The philosophical and ethical considerations of keeping companion animal species will be considered.

Aspects of animal physiology, nutrition, health and general husbandry introduced in earlier modules will form an essential background for this module.

Behavioural Methodology

Year of study 1
Code A5015C17
Credits 15
Core/option Core
Module contact [Professor Mark Rutter](#)

This module will cover the principles and methods of quantitative studies of animal behaviour. The often subjective nature of animal behaviour makes it all the more important to devise and conduct experimental studies that allow behavioural data to be recorded, analysed and interpreted objectively. This module aims to teach students to devise and conduct a variety of behavioural experiments, and use the knowledge and understanding gained from the module Principles of Animal Behaviour and Welfare to interpret their data. The synthesis of these should enable them to critically appraise published behavioural research papers. Note that this module will not teach statistical methods – these are taught as part of the Research Methods module.

Integrated Health Management

Year of study 1
Code A6021
Credits 15
Core/option Core
Module contact [Elizabeth Gilbert](#)

The purpose of this module is to develop the ability of students to assess the management status of contrasting animal management systems. This information can then be used to formulate appropriate programmes for the maintenance of the health and welfare of the animals and also of the health and safety of staff members and the public. This will require the application of knowledge and intellectual skills gained from Parts 1 and 2 of the course and from experience within the animal industry.

Advances in Equine Science

Year of study 1
Code A6002C17
Credits 15
Core/option Option
Module contact [Carole Brizuela](#)

Knowledge of the scientific principles that underlie recent advances in areas relating to equine health, nutrition and reproduction is increasingly important in an industry that has advanced considerably over the last decade. This module will build on the concepts learned in Equine Science and allow the student to develop a deeper understanding of issues affecting the equine industry in these three areas. Considerable independent study will permit students to develop the ability to discriminate, evaluate and analyse information from a variety of sources.

- Evaluate current issues affecting equine health, nutrition and reproduction.
- Critically comment on future and potential developments within equine reproduction.
- Apply advances in animal disease and nutritional science to the management of equine animals.

Advances in Farm Animal Health and Welfare

Year of study 1
Code A6018
Credits 15
Core/option Option
Module contact [Dr Moira Harris](#)

This module will deepen students' understanding of farm animal welfare and its links to animal health and disease control. It will allow students to develop their intellectual skills by identifying and analysing welfare problems in commercial production systems. The students will then have to apply technical knowledge gained in this and other modules in an attempt to solve these problems. With the increasing public interest in the welfare of farm animals, an understanding of different indicators and how these may show an animal's welfare status is required by those involved in any aspect of animal production.

Changes in animal health can lead to changes in animal welfare, just as changes in welfare can lead to changes in health. The module will increase students' understanding of how the health and welfare of farm animals are interlinked.

The increasing public concern for human food safety and the importance of animal health and animal welfare requires graduates to understand efficient diagnostic techniques and disease surveillance and possibilities for the future in this field. Understanding the production of effective animal medicines is also necessary.

BSc Top-up

Year 1

Degree Review Project (DRPROJ)	15
Applied Companion Animal Health, Welfare and Behaviour (A6012)	15
Animal Ethics (A5014C17)	15
Behavioural Methodology (A5015C17)	15
Advances in Farm Animal Health, Welfare and Behaviour (A6003C17)	15
Options	
Advances in Equine Science (A6002C17)	15
Animal Improvement and Bioethics (A6019)	15
Integrated Health Management (A6021)	15

Degree Review Project

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

Although Ordinary Degree students are not required to engage in the research based major projects completed by honours degree candidates, it is necessary that they display the ability, at Honours level, to learn independently and display the skills required for lifelong learning; to demonstrate awareness of the provisional nature of facts and principles and to marshal evidence and apply it in a balanced way in an argument and to draw soundly based conclusions. The development of these skills is the purpose of this module.

Applied Companion Animal Health, Welfare and Behaviour

Year of study	1
Code	A6012
Credits	15
Core/option	Core
Module contact	Mr Stephen Baugh

This module is designed to provide a detailed knowledge of the factors involved in the aetiology and development of common diseases seen in companion animals (cats, dogs, small mammals, birds and reptiles) and develops the skills required to develop disease control and prevention strategies.

The behaviour of companion animal species will be considered, how these behaviours may be suppressed in domestic settings and how this may lead to the development of pathology and inappropriate or abnormal behaviours. The prevention and control of behavioural problems will also be considered.

The philosophical and ethical considerations of keeping companion animal species will be considered.

Aspects of animal physiology, nutrition, health and general husbandry introduced in earlier modules will form an essential background for this module.

Animal Ethics

Year of study 1
Code A5014C17
Credits 15
Core/option Core
Module contact [Mr Stephen Baugh](#)

Most of us interact with animals on a daily basis, whether that be via our pets, via commercial animals in a work environment or through the animal products that most of us eat. Through these interactions animals are treated by humans in particular ways dependent on many factors including species, utility, religious or cultural beliefs and beliefs based on an animal's sentience or intrinsic value. This module considers our interactions with animals and explores the challenges we face when making moral judgements about how we utilise and treat animals. We will consider many questions that underpin our beliefs about other species and our interactions with them. How should we treat animals? Is it acceptable to use animals for our own benefit? Do animals have intrinsic value? Do animals have rights?

The main ethical theories that are useful when exploring these issues are discussed and explained and examples of how these theories can be applied to our interactions with animals are discussed.

Behavioural Methodology

Year of study 1
Code A5015C17
Credits 15
Core/option Core
Module contact [Professor Mark Rutter](#)

This module will cover the principles and methods of quantitative studies of animal behaviour. The often subjective nature of animal behaviour makes it all the more important to devise and conduct experimental studies that allow behavioural data to be recorded, analysed and interpreted objectively. This module aims to teach students to devise and conduct a variety of behavioural experiments, and use the knowledge and understanding gained from the module Principles of Animal Behaviour and Welfare to interpret their data. The synthesis of these should enable them to critically appraise published behavioural research papers. Note that this module will not teach statistical methods – these are taught as part of the Research Methods module.

Advances in Farm Animal Health, Welfare and Behaviour

Year of study 1
Code A6003C17
Credits 15
Core/option Core
Module contact [Dr Moira Harris](#)

This module will deepen students' understanding of farm animal welfare and its links to animal health, behaviour and disease control. With the increasing public interest in the welfare of farm animals, an understanding of different indicators and how these may show an animal's welfare status is required by those involved in any aspect of animal production. The welfare of animals is important not only during their housing and management but in response to handling, transport and slaughter; this module will focus on the welfare of farm animals in all of these situations. There is also growing public concern for human food safety and the importance of animal health; graduates in all fields of animal science need to understand efficient diagnostic techniques and disease surveillance and possibilities for the future in this field. Understanding the production of effective animal medicines is also necessary.

Advances in Equine Science

Year of study 1
Code A6002C17
Credits 15
Core/option Option
Module contact [Carole Brizuela](#)

Knowledge of the scientific principles that underlie recent advances in areas relating to equine health, nutrition and reproduction is increasingly important in an industry that has advanced considerably over the last decade. This module will build on the concepts learned in Equine Science and allow the student to develop a deeper understanding of issues affecting the equine industry in these three areas. Considerable independent study will permit students to develop the ability to discriminate, evaluate and analyse information from a variety of sources.

- Evaluate current issues affecting equine health, nutrition and reproduction.
- Critically comment on future and potential developments within equine reproduction.
- Apply advances in animal disease and nutritional science to the management of equine animals.

Animal Improvement and Bioethics

Year of study 1
Code A6019
Credits 15
Core/option Option
Module contact [Carwyn Ellis](#)

With the rapid developments in animal breeding technologies an understanding of the processes involved and their relevance to modern livestock production is required. This module will provide the student with the opportunity to apply the genetic principles underlying animal breeding to a number of species of animals and systems of livestock production. To undertake this, students will require an understanding of the systems used in livestock production and other roles to which animals are currently put and may be used for in the future in the context of the socio-economic environment in which they operate. In addition, the relationship between animals and humans is explored and consideration is given to the ethical implications of the various roles of animals in society and the manipulation of animals by biotechnological.

Integrated Health Management

Year of study 1
Code A6021
Credits 15
Core/option Option
Module contact [Elizabeth Gilbert](#)

The purpose of this module is to develop the ability of students to assess the management status of contrasting animal management systems. This information can then be used to formulate appropriate programmes for the maintenance of the health and welfare of the animals and also of the health and safety of staff members and the public. This will require the application of knowledge and intellectual skills gained from Parts 1 and 2 of the course and from experience within the animal industry.