

BSc (Hons)

# **Applied Animal Science with Therapy**

UCAS Code: D322

Typical offer: 112 UCAS tariff points or equivalent

Duration: 3 or 4 years full time; part-time available

Placement year: **Optional** 

Awarding body: Hartpury University

Apply for this course here: https://www.hartpury.ac.uk/university/courses/undergraduate/bsc-honsapplied-animal-science-with-therapy/bsc-honsapplied-animal-science-with-therapy-2023/

## **OVERVIEW**

# **Course overview**

Develop your therapeutic knowledge and launch your career making a difference to the lives of animals.

This degree will equip you with a range of scientific animal therapy skills. You'll work with both the animal and human to make sure animals are healthy and performing at their best.

You'll study animal anatomy and physiology – in particular the musculoskeletal system – genetics, health, disease and nutrition. Whilst studying the human element of this course, you'll learn about scientific communication and working in a therapy setting.

Draw on the industry experiences of your lecturers, a team of veterinary professionals, hydrotherapists and nutritionists, as you learn the theory and apply it in practice.

Your work placement will enable you to develop industry-standard skills whilst gaining real-life experience. You could work in our canine and equine therapy centres on site, or undertake a placement in industry.

This degree doesn't qualify you to become an animal therapist or physiotherapist, but it does you to focus on your therapy of choice and make an informed decision on your next step or goal.



# WHAT YOU'LL STUDY

# What you'll study

You'll gain an in depth understanding of the key topics in the field of animal science and therapy. This course is comprised of both compulsory and optional modules, which you'll be able to choose from to suit your interests and career goals.

Core subjects will include animal science, with a special focus on animal therapy and specifically, hydrotherapy. Optional modules change each year in line with student, industry and research demands - you'll find recent topics studied below. You can attend introductory sessions for optional modules before deciding which ones to study.

While this degree doesn't qualify you to become a therapist, it exposes you to the scientific principles which underpin animal health, performance, therapy and rehabilitation.

# Level four (year one)

This year will focus on key topics such as anatomy and physiology and give you a fundamental understanding of the key topics which underpin your learning. Develop knowledge and practical skills to study at higher levels in the course.

### **COMPULSORY MODULES**

### **Anatomy and Physiology**

Learn about basic veterinary anatomy and physiology with specific emphasis on the musculoskeletal system to relate to animal therapy.

#### **Animal Behaviour and Welfare**

Explore key concepts in the fields of animal behaviour and animal welfare.

#### **Animal Nutrition**

Study key nutritional principles and learn how these relate to health and disease in animals.

#### **Animal Genetics**

An introduction to the fundamental concepts of genetics and hereditary conditions in animals.

#### **Animal Health and Disease**

Gain an understanding of the factors that affect disease transmission and signs of health common companion animal species.



### **Fundamental Skills for the Animal Therapist**

Develop key academic and vocational skills and the personal attributes needed to be successful in a career in the animal industry. Includes work experience in our Canine Hydrotherapy Centre.

### **OPTIONAL MODULES**

#### None

There are no optional modules during this year. Your learning is focused on compulsory modules to ensure you have a thorough understanding of key topics to prepare you for module choices in your subsequent years.

# **Level five (year two)**

You'll cover a range of concepts, including animal therapy, hydrotherapy and animal structure and motion. Depending on the modules you select, you'll explore themes such as training, behaviour, microbiology and animal health and disease, allowing you to develop your personal interests.

## **COMPULSORY MODULES**

### **Introduction to Hydrotherapy**

Discover key aspects of hydrotherapy in both equine and canine centres.

### **Animal Therapy 1**

The first of two animal therapy specific modules that introduce a wide range of animal therapies.

#### **Animal Structure and Motion**

Understand the basis of biomechanics and animal locomotion.

### **Applied Animal Health and Disease**

Study advanced disease diagnosis, treatment and key pathogenic causes of disease in both companion and production animals.

### **Research Methods for Agricultural and Animal Scientists**

This module introduces students to the process of academic research, methods of research and analysis,

helping to prepare them for reading research literature and conducting research projects in the future.

## **OPTIONAL MODULES**

### **Animal Microbiology**

This module will also provide students with the opportunity to develop clinical awareness of animal behaviour and develop skills to interpret behavioural expression during patient interactions.

### **Companion Animal Behaviour and Training**

This module will examine the behaviour and psychology of the domestic dog and cat and our ability to train these animals to meet our own needs. This module will investigate the role of training both in the modification of the behaviour of animals demonstrating problem behaviours, and in the daily training for obedience, enrichment and husbandry practices. This will include evaluation of the different approaches to training of such animals, the ethical considerations and the justification of methods used.

#### **Ethics and Welfare**

Explore the influence of ethical theories upon attitudes towards animals and the consideration of animal ethics and welfare in a range of contexts.

### **Independent Report**

A chance to independently review an approved topic area in line with the student's programme of study.

### **Measuring Animal Behaviour**

This module introduces the use of sampling and recording methods, recording media, surveys and analysis techniques to measure animal behaviour and welfare across a wide range of species.

#### **New Venture Creation**



This module allows students to the explore the principles and practices faced by entrepreneurs whilst working through the process of developing a new commercial venture. The assessment offers students the chance to engage with their own new business idea and present to both business professionals and academic staff in a 'dragon's den' style pitch.

### **Applied Animal Nutrition**

Study key nutritional principles and learn how these relate to health and disease in animals.

# **Optional integrated placement year**

An optional integrated placement year between your second and final years gives you the opportunity to put your knowledge and skills into practice and gain valuable industry experience.

# **Level six (final year)**

Your final year allows you to focus on areas that are of particular interest to you and will support you in your future career. You'll undertake a substantial research dissertation project, enabling you to experience the responsibility of planning, implementing and reporting on a specialist topic. In addition, you'll be exposed to contemporary challenges in therapy and rehabilitation. Studying advanced theory, you'll gain an insight into where current research is focussing.

## **COMPULSORY MODULES**

### **Animal and Agriculture Dissertation**

This module involves independent research and analysis in an animal or agriculture-related field with one

to-one support from an academic.

## **Therapy in Practice**

Understand how the theory learned in earlier modules is applied within a practice.

## **Animal Therapy 2**

The second module specifically exploring the types of therapies used within the animal industry.

## **OPTIONAL MODULES**

## **Advanced Animal Microbiology**



Advanced Animal Microbiology builds on the knowledge and understanding obtained from the Animal Microbiology module at level 5. This module analyses a range of biotechnologies and diagnostics used in the study of animal microbiology, providing students with an indepth understanding of the underlying principles behind these advanced techniques. Students will evaluate current developments in microbial molecular genetics and how this research is applied to advance treatment and control strategies in veterinary science.

#### **Advanced Animal Nutrition**

The Advanced Animal Nutrition module focuses on the ways in which current and future aspects of animal nutrition can assist in the welfare and performance of different animals, additionally focusing on animal nutritional approaches for crucial environmental sustainability.

### **Anthrozoology**

Anthrozoology is the study of human-animal interactions, exploring the impact animals have on our lives, and the impact they have on ours.

### **Cognitive Ethology**

Develop the ability to critically evaluate the evidence supporting cognitive abilities in non-human animals.

## **Developments in Animal Science**

In this module you will learn about the very latest scientific research across the animal sciences, with research talks from academics at Hartpury and from universities across the UK. You will also refine your ability to develop your own research ideas.

### **Epidemiology**

You will study how diseases are transmitted and spread through populations and understand how the dynamics of this spread can be studied and monitored. You will use this knowledge to analyse appropriate methods to help avoid, track and control disease epidemics.

Please visit our document library for more module information.

## **HOW YOU'LL STUDY**

# How you'll study

We're committed to supporting you to fulfil your unique potential, which is why you'll receive minimum of 15 hours of scheduled teaching time per week in your first year - this is 25% above the

UK average.

# Your support network

You'll benefit from a strong support network from day one to be the best you can be. This will range from your personal tutor and specialist academic support team (our Achievement and Success Centre) to dedicated wellbeing and employability (Innovation, Careers and Enterprise) centres.

# **Your learning experiences**

You'll experience a range of teaching methods to strengthen your digestion of topics, including lectures, workshops and practical sessions, as well as supported work placement learning as part of many courses.

### **Your career**

Each year of your course will be made up of two semesters, within which you'll study compulsory and optional modules on different industry-focused topics, enabling you to develop your own unique portfolio of knowledge, skills and experience, ready for your career.

### **Further details**

The course is taught in English.

# + Academic support

You'll have your own personal tutor while you're here who will support you to succeed in your studies. You'll also have access to our academic and wellbeing support teams who run regular workshops and one-to-one sessions on campus and online.

Alongside this, we have a comprehensive bank of online study skills resources to help you make the most of your qualification.

# + Module credits

On successful completion of your modules you'll gain academic credit that accumulates towards your award. The marks you gain in your second and third years may contribute towards your final degree classification.

# + Teaching modes

The modules contain a mixture of scheduled learning – lectures, workshops, seminars and practical sessions – alongside independent learning. You're expected to dedicate at least two to three hours of independent study per contact hour. Some modules offer trips to locations, such as dog training facilities, to show students how their knowledge can be applied within the animal industry. Some modules may also bring in guest lecturers to provide topical and industry-relevant talks.

Year	Contact learning	Placement learning	Independent learning	

Year	Contact learning	Placement learning	Independent learning
Level four (year one)	29%	1%	70%
Level five (year two)	23%	0%	77%
Placement year - optional	1%	80%	19%
Level six (final year)	16%	3%	81%

# + Teaching contact time

You'll receive a minimum of 15 hours scheduled contact time per week in your first year. In subsequent years, scheduled contact will vary depending on the modules you select but is typically around 12 hours per week.

# + Assessment and feedback

You'll be assessed through a mixture of written exams, practical exams and written assignments or coursework. Many of the modules will be marked based on a mixture of assessment types, whilst others will be based solely on one type of assessment. Feedback will be given with each assessment either via a feedback sheet or summary page, or via an academic tutorial.

Year	Written exam	Practical exam	Coursework
Level four (year one)	39%	22%	39%
Level five (year two)	53%	11%	36%
Placement year - optional	0%	0%	100%
Level six (final year)	22%	4%	74%

# + Timetables

Each year of this course is taught over two semesters, normally consisting of 12 weeks of scheduled teaching and then assessment weeks, with an overview below:

scheduled teaching takes place between 8:30 to 20:30 Monday to Friday

- Wednesday afternoons are normally reserved for sports and cultural activities
- work placements may entail different days and hours
- part-time students may need to attend learning activities five days each week, depending on modules selected
- timetables are available during enrolment week

View term dates →

# **EMPLOYABILITY**



## **Your career**

Industry opportunities on this course are diverse to ensure you develop the skills, experience and connections needed for your graduate career. Many of our students secure graduate roles with their work placement employers.

# **Work placements and experience**

These form part of your core modules, alongside an optional integrated placement year. We'll support you to secure a placement with a UK-based employer, to match your interests and career goals. Placements can be paid or unpaid, depending on the position. Students have worked with a variety of both equine and canine therapy centres.

Our commercial canine and equine therapy centres also offer opportunities for students to gain industry experience ready for their careers – either on work placements or as part of voluntary roles.

# **Field trips and guest lecturers**

Field trips and industry professionals in lectures form an important part of your learning, enabling you to experience different businesses, careers and best practices.

Recent field trips have included Guide Dogs for the Blind and Crufts. Extra fees may be required.

Students have also heard from expert guest lecturers specialising in the therapy, veterinary and dog training professions.

## **Graduate destinations**

As an Applied Animal Science and Therapy graduate, you may go on to work in a variety of some such as animal nutrition, therapy, health and diagnostics. You'll also have the transferable skeeped for other graduate careers. Our careers team can support you to find and prepare to seepour perfect role. Possible graduate destinations include:

- Canine or Equine Hydrotherapist (with further qualifications)
- Animal Physiotherapy (postgraduate study)
- Animal Therapy
- Animal Nutrition
- Research Assistantships
- Masters and PhD programmes
- Laboratory Technicians

## **FACILITIES**



# **World-class facilities**

You'll have access to a diverse range of facilities while you're here, many of which are newly built and world class. Alongside lecture halls and workshop spaces, these include:

### **Laboratories**

Our laboratories are modern and well equipped, providing the ideal spaces for scientific activities and research. Some are used for specialist microbiological culturing and analysis, others for biochemistry and physiology.

### **Animal Collections**

We have a variety of animal collections including both domestic and exotic species. Activities within these areas include handling, management and welfare assessments. Technologies to enhance our understanding of animals include thermal imaging and biomechanics analysis, as well as a range of behavioural measurement tools.

# **Canine and equine therapy centres**

Our on-site commercial canine and equine therapy centres offer opportunities for you to gain industry experience ready for your career. You'll get to work alongside trained physiotherapy and hydrotherapy professionals to enhance industry experience and skills.

# **Study spaces**

Our University Learning Centre has books, journals, ebooks, computers and breakout study spaces. In addition, we have a Study Lounge – an informal space with sports equipment, study booths and chill-out spaces to support both studying and relaxation.

# **ENTRY REQUIREMENTS**



# **Entry requirements**

- **UCAS tariff points** | A typical offer for this course is 112 UCAS tariff points or equivalent.
- **GCSE** | A minimum of 5 GCSE A\* to C, (or 9 to 4 where numeric grades are being awarded) or equivalent, to include English Language and Mathematics.
- **A-level** | Typical offer is BBC or equivalent. This must include a minimum of two A Levels including one in Biology at grade D or above.
- **Vocational Award** | Typical offer is a DMM in an Extended Diploma in a relevant subject.
- Access | Typical offer is 112 UCAS tariff points in an Access to Higher Education Diploma to include a minimum of a pass in a Biology module at Level 3.
- **IB** | Typical offer is 112 UCAS tariff points in an IB Diploma, to include a minimum of two Highers at H3 or above including one in Biology. This must also include Maths and English Language at a minimum of Standard Level S3 if equivalent GCSEs have not been obtained.
- **Scottish Highers** | Typical offer is 112 UCAS tariff points in an IB Diploma, to include a minimum of two Highers at H3 or above including one in Biology.

  This must also include Maths and English Language at a minimum of Standard Level S3 if equivalent GCSEs have not been obtained.
- Irish leaving Certificate | Typical offer is 112 UCAS tariff points in the Irish Leaving Certificate. This must include a minimum of two Highers including one in Biology at H4 or above. This must also include Maths and English Language at a minimum of Ordinary Level.
- **OCR Cambridge Technical** |Typical offer is a DMM in a Cambridge Technical Extended Diploma in a relevant subject.
- **T Levels** | Typical offer is Merit in your T Level overall grade in a relevant subject
- We may interview mature applicants and those with non-traditional qualifications to ensure this is the right course for you.
- The minimum academic entry requirement for this programme is 80 UCAS tariff or equivalent providing this is combined with relevant experience.
- Please contact us for further information:

Email us →



## FEES AND FUNDING

# **Tuition fees and financial support**

Please visit our student finance page for information on tuition fees and student loans, as well as non-repayable grants, bursaries and scholarships, eligible to different groups, to support with study costs.

## **Explore student finance** >

Below, you'll find extra costs associated with studying this course.

### **Clothing and footwear**

You'll need to purchase appropriate clothing and footwear before you enrol, or during enrolment week. We'll let you know exactly what you need to purchase in your enrolment guide – everything is available from our supplier's online shop for approximately £100.

### **Visit Hartpury shop** →

### **Optional field trips**

While some trips are included in the course fees, there is the opportunity to engage in optional trips with additional costs involved. These trips change year on year. Any extra opportunities and the associated costs will be communicated with you.

#### **Accommodation and living costs**

Please visit our student accommodation page for details.

## **Explore accommodation** >







## **Top 10**

We're in the top 10 UK universities for teaching quality (The Times and

# **Top 10%**

We're in the top 10% of UK providers for student satisfaction (NSS, 2020)

## 97%

of graduates are in employment, further study or other purposeful activity



The Sunday Times Good

(Graduate Outcomes

### **HOW TO APPLY**

You can apply for the BSc (Hons) Applied Animal Science with Therapy degree course via UCAS.

### **FURTHER COURSE DETAILS**

For further details about this course, including the programme specification and module descriptions, please visit our document library.

### **Important information**

Every effort has been made to ensure the accuracy of our published course information, however our programmes are reviewed and developed regularly. Changes or cancellation of courses may be necessary to ensure alignment with emerging employment areas, to comply with accrediting body requirements, revisions to subject benchmark statements or as a result of student feedback. We reserve the right to make necessary changes and will notify all offer-holders of changes as and when they occur.

\*Reflects activities after 15 months for those who graduated in 2020.

### **CONTACT US**

#### **ADDRESS**

Hartpury University and Hartpury College Gloucester GL19 3BE



- https://twitter.com/hartpury

- https://www.instagram.com/hartpury

in - https://www.linkedin.com/school/hartpury/

- https://www.youtube.com/c/HartpuryUniversityandHartpuryCollege

