

Programme Specification

Part 1: Basic Data			
Primary Programme Title	BSc (Hons) Veterinary Biosciences		
Target Award Titles	Mode and Typical Duration of Study	Professional Accrediting Body Links	Study Abroad / Exchange / Credit Recognition
BSc (Hons) Veterinary Biosciences	Stage 1 Entry: Full time, 3 years	None	None
Interim Award Titles	BSc Bioveterinary Science BSc Animal Studies Diploma of Higher Education in Animal Studies Certificate of Higher Education in Animal Studies Undergraduate Certificate in Animal Studies Certificate in Academic Skills		
Teaching Delivery Method	On-site		
Awarding Institution	Hartpury University		
Teaching Institution	Hartpury University		
Delivery Location	Hartpury		
Department Responsible for Programme	Animal and Agriculture		
Unit-E Code	BSHABVSV		
Entry Criteria Information	Applicants will have achieved entry criteria appropriate for the stage of entry, which can be found through the Hartpury website (www.hartpury.ac.uk)		
Most Recent Validation Date	17 March 2023	Due for Re-validation By	01 September 2027
Amendment Approval Date	V1.1- 27 July 2023	Approved With Effect From	V1.1 – 01 September 2023
Professional Accrediting Body Approval Date	N/A	Date for Re-accreditation	N/A
Version	1.1		

Part 2: Programme Overview

A BSc (Hons) Veterinary Biosciences graduate will have had the opportunity to expand their knowledge and understanding of animal biology with a focus on topics related to animal health and disease, supporting individual interests and career aspirations. Graduates will have developed skills in critical enquiry and evaluation of current process and practices in veterinary biosciences. Graduates will have acquired current subject knowledge that can be applied to solve challenges within the wider veterinary industry. They will possess the fundamental vocational skills and graduate attributes to enable them to be an effective team member within veterinary medicine, laboratory, and animal management environments. Graduates have been exposed to a range of veterinary diagnostic practices and will be confident to assist with animal health assessments. They will also be able to evaluate the role of a range of laboratory diagnostic techniques within industry and how these are utilised in small- and large-scale animal environments.

Part 3: Programme Structure

This structure diagram demonstrates the student journey from enrolment through to graduation for a typical **full time student on the primary programme**, including:

- level and credit requirements
- award requirements that are in addition to those described in the Hartpury University Academic Regulations
- module diet, including core and optional modules.

Please note:

*PAB – these modules are subject to additional and variant regulations as part of an accreditation by a professional accrediting body

+ Non-condonable – these core modules are not able to be condoned

	Core Modules	Optional Modules	Target and Interim Awards
Stage 1	HANXNW-30-4 Anatomy and Physiology HANV83-15-4 Principles of Animal Welfare and Behaviour OR HANV83-15-4 Animal Behaviour and Welfare <i>pre-2023 only</i> HANXNV-15-4 Animal Genetics HANXKK-15-4 Animal Health and Disease HANXK5-15-4 Animal Nutrition HANXNY-15-4 Introduction to Biochemistry ⁺ HANVMJ-15-4 Professional and Academic Skills in Animal Biology	None	<u>Certificate in Academic Skills</u> <u>Undergraduate Certificate in Animal Studies</u> <u>Certificate of Higher Education in Animal Studies</u>
	To progress to stage 2 you must achieve at least 90 credits and usually have an average mark of at least 60%. Students not achieving this average mark will usually be transferred to the BSc (Hons) Bioveterinary Science course route.		
Stage 2	HANVQ3-30-5 Animal Disease and Parasitology ⁺ HANXRK-15-5 Animal Microbiology HANXSL-15-5 Animal Production		<u>Diploma of Higher Education in Animal Studies</u>

	<p>HANXU4-15-5 Animal Therapy 1</p> <p>HANVP7-15-5 Biochemistry and Toxicology⁺</p> <p>HANVMV-15-5 Professional Experience in the Animal Sector 1</p> <p>HANXT9-15-5 Pathology</p>		
	To progress to stage 3 you must achieve at least 210 credits at stage 1 and 2.		
Stage 3	<p>HANV4T-15-6 Advanced Animal Microbiology</p> <p>HANV3S-30-6 Applied Research Project⁺</p> <p>HANV3H-15-6 Epidemiology</p> <p>HANVQF-30-6 Immunology and Animal Disease⁺</p> <p>HANV4Y-15-6 Investigative Skills for the Successful Undergraduate</p> <p>HANV3L-15-6 Pharmacology</p>		<p><u>BSc Animal Studies</u></p> <p><u>BSc Bioveterinary Science</u> Must include all core module except Applied Research Project.</p> <p><u>BSc (Hons) Veterinary Biosciences</u> Must include all core modules.</p>

Part time:

The part time student journey from entry through to graduation is individually negotiated with the student.

Part 4: Programme Learning Outcomes

Modules in bold are core modules and modules not emboldened are optional modules.

A denotes a module that assesses a learning outcome and B denotes a module aligned with a learning outcome.

Learning Outcomes:	Anatomy and Physiology	Animal Genetics	Principles of Animal Welfare and Behaviour	Professional and Academic Skills in Animal Biology	Animal Nutrition	Introduction to Biochemistry	Animal Health and Disease	Animal Disease and Parasitology	Pathology	Animal Therapy 1	Animal Production	Animal Microbiology	Professional Experience in the Animal Sector 1	Biochemistry and Toxicology	Immunology and Animal Disease	Pharmacology	Epidemiology	Advanced Animal Microbiology	Investigative Skills for the Successful Undergraduate	Applied Research Project
A) Knowledge and Understanding of:																				
1. The problems and new insights in the field of veterinary bioscience including issues pertaining to the area of diagnostic techniques and animal health.							B	A	B	B	B	A		A	A	A	B	A	B	B
2. Biochemical, anatomical, physiological and nutritional principles related to animal health and disease.	A	B			A	A		A	A	A	A			A	A	A	B			
3. The different modes of disease transmission, and							B	A	B		B	B			A		A	B		

the effects on individuals and populations.																				
4. How to perform laboratory tests relevant to given situations and evaluate the validity of test results within the context of the clinical case.	B				A	B			A			A					A		B	
5. How established techniques of research and enquiry are used to create and interpret knowledge in the applied science discipline.			A	A				B					B	B	B	B	A	A	A	
B) Intellectual Skills																				
1. Use problem solving skills and decision making strategies to support test results in the context of the clinical case.	B				B	A	B	B	A	B		A		A	A	B		A		
2. Use skills of reflection, evaluation and critical thinking to support effective diagnostic techniques in the veterinary bioscience context.							A	A	A	B		A		B	A			A		
3. Demonstrate the ability to apply critical evaluation and informed decision making when undertaking diagnostic techniques in relation to animals both in health and sickness.			B	B			B		A	B		A		B	B	B		A		
4. Demonstrate the ability to undertake sustained study applying deeper cognitive learning to an aspect of animal health/disease.				B			B	B			B	B		B	A	B	B	B	A	
5. Critically evaluate an aspect of veterinary bioscience based on systematic rigorous research processes which highlights both implications and recommendations for developing current and future diagnostic practice.				B				B	B	B		B		A	A	B		B	A	A

6. Demonstrate a commitment to continuing professional development and lifelong learning through the development of skills in relation to self - directed and independent study.				A									A						A	A
C) Performance and Practice																				
1. Critically evaluate an aspect of veterinary bioscience based on systematic rigorous research processes which highlights implications, recommendations and sustainable development within current and future practice.				B		B	B	A		B	B			B	A	A	B	B	B	A
2. Undertake skilled and competent evaluative and practical veterinary skills	A				A	B	B	A	A	B		A					B	A		B
3. Acknowledge diversity and communicate effectively with individual clients and veterinary surgeons establishing professional and ethical relationships				B						B			A		B	A		B		B
4. Maintain the standards and practices required of the industry	B			A				B	A	A	B	A	A	B	B	B	B	A		B
5. Work professionally with others as an effective team member.				B						B		B			B			B		A
6. Recognise moral/ethical dilemmas and issues.		B	A	B				A			B		B			B	B			A
D) Setting, Personal and Enabling Skills																				
1. Communicate effectively using a variety of means	B	B	B	B	B	B	B	B	B	B	B	B	A	B	A	A	A	A	A	A
2. Evaluate their own academic, vocational and professional performance supported by feedback and personal reflection				A									A						B	B
3. Utilise problem solving skills in a variety of				A	B	A	B		B	B		A	B				B	A	B	A

theoretical and practical situations																				
4. Manage change effectively and respond to the evolving demands of the industry demands				B								A					B		A	
5. Take responsibility for personal and professional learning, wellbeing and career development				A								A						B	A	
6. Understand career opportunities and challenges ahead and begin to plan a career path				A					B				A					B		
7. Use information management skills, for example, information technology, library resources, the use of information technology in the workplace.				A	B	B			B			B	B	B			B	B	A	A

Part 5: Learning, Teaching and Assessment

Learning, Teaching and Assessment Journey:

The Veterinary Biosciences programme utilises a mixture of teaching and assessment approaches, which aim to support the student to develop comprehensive knowledge and understanding of the principles of animal health and disease. Learning opportunities are varied, with students able to put theory into practice using the campus animal facilities and real-life situations and events. The teaching and learning strategies employed within modules aim to develop graduates who can recognise trends and patterns, and propose justified solutions to problems related to animal health and disease.

Students will experience a variety of assessments in the wide range of core modules provided, including coursework, written examinations, oral presentations, project reports and practical skills logbooks. There will be a range of assessments at each stage to support students to build confidence in applying their written, oral, and practical skills as they progress through the course towards their final dissertation and to ensure they have the skills to excel in employment or further study. The programme will have the following distinct features for each stage of delivery:

Stage 1: Delivery is focused on providing a scientific foundation to support students' academic and interpersonal skill development. To achieve this, stage 1 concentrates on the development of fundamental knowledge of animal health and disease, anatomy and physiology, biochemistry and animal nutrition. Students will learn how to assess animal health, with an introduction to behaviour and welfare as well as beginning to gain an appreciation of animal disease and biochemical processes. Intellectual skills are developed through lectures, seminars, practical sessions and academic workshops. Assessments are designed to support students' development in key academic skills appropriate to stage 1 by providing a range of assessment types that will support their progression through the programme. Laboratory reports, case study reports and examinations are a key feature of the assessments at stage one to replicate basic industry requirements and ensure they have the underpinning knowledge to progress to stage 2. Written skills will gain further feedback to allow students to build their intellectual skills to show they have gained the core skills to analyse and evaluate research and practice.

Stage 2: Delivery and assessment aims to consolidate the knowledge and skills developed in stage 1. Students are encouraged to evaluate veterinary diagnostics, and disease management and prevention protocols for a variety of species. In stage 2, students continue to apply their knowledge and understanding through evidence-based learning and application into practice. Some assessments will reflect this applied learning and provide students an opportunity to demonstrate their knowledge and understanding via practical skills assessments and use of the on-campus resources including a wide range of animal species. In addition, students will undertake a period of professional working experience in the animal sector in order to prepare them for a career and / or further study in the veterinary sciences.

Stage 3: Delivery and assessment aims to provide students with opportunities to apply research and the skills they have developed into practice, facilitating individual specialisation within their chosen career path. The final stage concentrates on the individual development of the student and the expansion of their specialist career path. Taught content will focus on evaluation of emerging issues across the developing animal health industry and students will be encouraged to engage in critical review and evidence-based learning, with opportunities to put this into practice during industry or research focused projects. Students will enhance skills of reflection and application through engagement with industry, culminating in the assessment of a case study-based module, for reflective improvement and advancement of industry research and practice.

Contact time encompasses a range of face to face scheduled activities as described below. In addition, a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated. On the Veterinary Biosciences programme, teaching is a mix of scheduled and independent learning. Students will have scheduled practical experiences within the on-site commercial animal enterprises, providing them with opportunities to interact with different species and with

professionals in real-world settings. Throughout their studies, students are encouraged to engage with volunteering opportunities to develop their practice and subject knowledge. Students will develop an ethos for ethical, welfare-centred practice, with a strong focus on the improvement and refinement in the areas of animal health and disease.

Teaching will incorporate access to various resources onsite at the institution, including the onsite canine and equine therapy centres, animal collection, farm, equine centre and the wider estate. During their research, students will be fully supported by academic staff, animal health and disease experts, laboratory staff and industry mentors. A range of equipment is available for students to develop their vocational skills in a safe teaching environment. This equipment is updated on a regular basis to reflect current practice in industry, and the needs of research activities. Classrooms are situated throughout the University, which allows for a seamless transfer between theory and practical activities. The teaching team have a high degree of industry-relevant experience that covers all aspects of the programme, and are actively engaged in research and knowledge exchange activities.

Students have access to the University Learning Centre (ULC) to support their studies. Students can access a wide range of textbooks and journals alongside ICT facilities. There are dedicated areas for individual study, group study and a higher education flexible study zone. These facilities are all available to students to support their studies. Students with specific learning requirements will be supported through the HE Learning Support Service which works with the individual student to facilitate them accessing support through government schemes, provides them with study advice to maximise their chances of success and where necessary guides them through applying for alternative means of assessment.

Careers: To support students' career preparations, personnel from the careers department will provide students with opportunities to map progress towards chosen career paths and develop effective CVs or interview techniques. Industry professionals will also visit the institution on an annual basis, as part of an Animal Careers Insight day, to support students to develop their employability prospects and engage directly with employers. A range of online resources linked to employability will also be signposted to students via the programme's Moodle page, Innovations, Careers, and Enterprise team, and academic tutors. Tutors will typically offer subject specific careers advice through module sessions or within individual tutorials.

This programme will be assessed according to the approved Academic Regulations.

Students registered on this programme will have access to the Hartpury University support services.

The distinctive module used by the Programme Examination Board to inform recommending differential awards for students when considering borderline performance profiles will be: Immunology and Animal Disease

Professional Accrediting Body documents to which this programme is mapped and or aligned: none

Assessment Map

		Type of Assessment*							
		Coursework	Report	Portfolio	Written Examination	Written Test	Practical Skills Examination	Practical Skills Assessment	Oral Assessment
Core Modules Stage 1	Anatomy and Physiology							A (100) Practical Skills Logbook	
	Introduction to Biochemistry				A (100) Written Examination				
	Animal Health and Disease								A (100) Group Oral Assessment, individually marked
	Animal Genetics					A (100) Test Series			
	Principles of Animal Welfare and Behaviour	A (100) Coursework							
	Professional and Academic Skills in Animal Biology							A (100) Practical Skills Logbook	
	Animal Nutrition		B (50) Report		A (50) Written Examination				
Core Modules Stage 2	Animal Disease and Parasitology	B (40) Coursework			A (60) Written Examination				
	Pathology						A (100) Practical Examination		
	Animal Microbiology								A (100) Poster Defence

	Professional Experience in the Animal Sector 1			A (100) Industry Experience Portfolio					
	Biochemistry and Toxicology			A (100) Coursework Portfolio					
	Animal Production		A (100) Report						
	Animal Therapy 1								A (100) Oral Presentation with Questions
Core Modules Stage 3	Investigative Skills for the Successful Undergraduate	B (50) Coursework				A (50) Test			
	Applied Research Project		A (100) Project Report						
	Immunology and Animal Disease	B (50) Coursework			A (50) Written Examination				
	Advanced Animal Microbiology		A (100) Report						
	Epidemiology		A (100) Case Study Report						
	Pharmacology								A (100) Poster Defence



*Indicative assessment types for new students enrolling on this programme after the date this specification takes effect (Part 1) are shown in terms of either **Coursework**, **Written Examination**, or **Practical Examination** as indicated by the colour coding above.

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found through Hartpury's website (www.hartpury.ac.uk).

Approved Programme Amendment Log

Primary Programme Title:	BSc (Hons) Veterinary Biosciences
Programme Code:	BSHABVSV
Initial Approval Date:	17 March 2023

Changes:

Current version number:1.0	
Outline Change Details: Parts 3, 4 and 5: Stage 1 / Level 4 core module HANV83-15-4 Animal Behaviour and Welfare module name changed to Principles of Animal Welfare and Behaviour. Part 4: Programme Learning Outcomes mapping - A removed from C5 for Animal Genetics, as this module no longer includes a group assessment. Part 5: Learning, Teaching and Assessment - mention of a minimum of 15 hours per week of contact hours removed. Part 5: Assessment Map updated to reflect module amendments. Stage 1 / Level 4 core modules: Introduction to Biochemistry changed from Test to Written Examination; Animal Health and Disease changed to A (100) Group Oral Assessment, individually marked (was group mark), and Test removed; Animal Genetics changed to A (100) Test Series (was Test), and Group Poster Coursework removed; Principles of Animal Welfare and Behaviour (was Animal Behaviour and Welfare) changed to A (100) Coursework, and Written Examination removed. Stage 2 / Level 5 core modules: Pathology changed to A (100) Practical Examination, and Written Examination removed; Animal Therapy 1 changed to A (100) Oral Presentation with Questions, and In-Class Test removed. Stage 3 / Level 6 core modules: Immunology and Animal Disease changed from 60:40 to 50:50, and Component B changed from Essay to Coursework; Advanced Animal Microbiology changed to A (100) Report, and Written Examination removed; Epidemiology changed to A (100) Case Study Report, and Written Examination removed; Pharmacology changed to A (100) Poster Defence, and Written Examination removed.	
Do the changes presented alter the mapping against the Hartpury University Curriculum Framework (delete as appropriate)? No	
If yes, please provide the details of the changes:	
Material Alteration: Yes and is accompanied by the relevant course information document.	
Rationale: Assessment strategy has been reviewed to provide a more balanced variety of assessment types and reduce the overall load for both students and staff.	
Change requested by: Wanda McCormick I can confirm that student representatives have been consulted about this change I can confirm that colleagues impacted by this change have been consulted I have retained evidence of these consultations, which will be summarized within the Programme Enhancement Report 	
Signature:	Date: 04/07/23
Name of Head of Department: Wanda McCormick I confirm that this change does not require additional resources beyond the scope of those already present or planned for by the department 	
Signature:	Date: 04/07/23
Approval Committee and Date:	CVC Deputy Chair's action (SB / LD) 2023 07 27
Change approved with effect from:	01 September 2023
Resulting new version number:	1.1 (2023 intake)

Outline Change Details: new course route	
Approval Committee and Date:	CVC 2023 03 17
Change approved with effect from:	01 September 2023
Resulting new version number:	1.0