

# HARPER ADAMS UNIVERSITY

## Programme Specification

<b>1</b>	<b>Awarding Institution:</b>	Harper Adams University
<b>2</b>	<b>Teaching Institution:</b>	Askham Bryan College
<b>3</b>	<b>Course Accredited by:</b>	Not Applicable
<b>4</b>	<b>Final Award and Level:</b>	BSc / BSc (Hons) (Level 6)
<b>5</b>	<b>Interim Award(s) and Level(s):</b>	Certificate of Higher Education (Level 4) Diploma of Higher Education (Level 5) BSc (Level 6)
<b>6</b>	<b>Award Title:</b>	Animal Management and Science
<b>7</b>	<b>UCAS Code:</b>	D302
<b>8</b>	<b>JACS Code(s):</b>	C300
<b>9</b>	<b>QAA Benchmark Statement(s):</b>	The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2014) Agriculture, Horticulture, Forestry, Food and Consumer Sciences (2016) Biosciences (2015) Business and Management (2015)
<b>10</b>	<b>Language of Study:</b>	English
<b>11</b>	<b>Mode of Study:</b>	Full-time Part-time
<b>12</b>	<b>Date Approved or Revised:</b>	Animal Management Validation Event – 10 <sup>th</sup> January 2017 (September 2017 – August 2023)

### CONTEXT AND RATIONALE

The BSc/BSc (Hons) Animal Management and Science programme has been designed for students who wish to develop knowledge and skills to enter the animal industry in areas related especially to animal health, science and conservation.

Lantra, (2012) indicated that graduates in the animal industry need educating to a high standard to meet future change particularly in the areas relating to health and welfare legislation, economic factors affecting the sustainability of the industry as well as environmental change.

Furthermore, it has been recognised that field identification skills remain a critical skills gap in the monitoring of biodiversity and the impact of climate change (Lantra, 2012). Moreover, the Lantra Skills Assessment Report for the industry (2009) indicates that: “the sector has undergone great change in recent years, which has led to an increasing demand for high skilled workers”. Lantra reported that the Animal Care sector encompasses a wide variety of roles with opportunities to move between different roles and it is expected that by 2020 the animal management industry will need a minimum of 90,000 new entrants (Lantra, 2012).

Organisations such as FERA employ over 550 scientists and have over 7,500 government and commercial customers leading to, in a typical year publication of over 150 papers in peer-reviewed journals (FERA, 2015).

With the extensive development of the Animal Unit and the science laboratories, Askham Bryan College is providing state of the art facilities enabling the college to respond to both present and future education and training needs. The aim is to inspire students to become industry professionals who are practically able, critical and independent thinkers with specialist knowledge that enables them to work in a range of animal establishments.

Students will study a wide range of animals to develop appreciation of their anatomical structure and physiological processes as well as the inter-relationship between the animal and their environment. The college has a large and well stocked animal unit, farm and equine centre providing an excellent range of practical opportunities. Students are encouraged to use their summer vacation to gain valuable work experience. Students studying the course may enter a wide variety of roles in the industry, working in animal welfare, zoo management, education, conservation, health and science related areas. Many students progress to higher level study.

## GENERIC AIMS

All BSc/BSc (Hons) Animal Management and Science awards aim to provide the following:

1. To develop in each student subject knowledge and understanding appropriate to individual interests and developing vocational needs.
2. To develop each student's intellectual powers, their understanding and judgement, their ability to see relationships within what they have learned and to examine the field of study in a broader perspective.
3. To develop the personal effectiveness and employability of students, in particular their ability to learn, to communicate, to work with others and to solve problems.
4. To develop those skills of professional scholarship required for career management, lifelong learning and innovation.
5. To inculcate an awareness of the wider consequences of economic activity and a determination to minimise harmful effects on the environment and people
6. To provide a lively, stimulating and challenging educational experience.

## AWARD-SPECIFIC AIMS

The BSc/BSc (Hons) Animal Management and Science award aims to provide the following:

1. To develop in each student an understanding of biological and welfare needs of animals and how to monitor and manage systems to meet these needs.
2. To develop an understanding in students about animal husbandry and health for both domestic and exotic species.
3. To develop in students an appreciation of the complexity and diversity of life processes in animals at molecular, cellular and physiological level.
4. To develop an understanding of the principles of animal genetics and evolution and the interaction between animals and their environment.
5. To develop students' research skills to allow them to generate realistic and imaginative research projects related to their animal studies.
6. To develop communication and management skills and the ability to apply them to problems associated with captive and wild animal management.

## GENERIC OUTCOMES

On successful completion of the BSc/BSc (Hons) Animal Management and Science awards, students will be able to:

A	Knowledge	Demonstrate a detailed and specialised knowledge of a range of theories, ideas, terminology and contexts associated with the discipline, with a clear appreciation of the ways in which knowledge
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		is developed and the provisional nature of knowledge.
B	Problem Solve	Select, devise and evaluate the use of appropriate strategies to solve complex, unpredictable, ambiguous and real-world problems.
C	Analysis	Analyse complex data using appropriately selected techniques; draw out robust findings in this process; and, thoroughly evaluate the effectiveness of the analytical strategy.
D	Synthesis	Select and combine ideas and/or data to generate meaningful and convincing composite evidence or arguments with a clear purpose.
E	Evaluation	Review complex and unpredictable information to address unpredictable, ambiguous or real-world problems, with a good awareness of the limitations of both the material under review and the analytical approach.
F	Digital Competence	Select, use and evaluate technologies to enable or enhance the performance of specific tasks, and appreciate the evolution of technology in their discipline.
G	Team Work	Work effectively with others, with minimal or no supervision, to achieve positive outcomes; demonstrate leadership and management capabilities within a team situation; and, critically assess their personal contribution to the team.
H	Career Dev	Recognise, pursue, record and reflect on personal development to pursue personal career goals and appreciate the changing nature of the workplace and the need for personal resilience and lifelong learning.
I	Communications	Communicate effectively and professionally for a range of different purposes and through different modes, with consideration of audience needs as well as other contextual factors such as commercial sensitivity, impact maximisation and accessibility requirements.
J	Practical Comp	Perform practical operations in complex, unpredictable, real-world situations that require the selection of combined or novel practical skills and critically review personal effectiveness in practical tasks with reference to relevant professional standards.
K	Autonomy	Act independently and autonomously with minimum supervision in academic and practical tasks.
L	Research	Select and use research to inform the development of knowledge and understanding, and to inform decision-making.
M	Sustain Practice	Evaluate the sustainability of practices, processes or developments, with attention to different stakeholder perspectives, unintended consequences, economic and social dimensions, or environmental considerations.
N	Global	Compare and contrast international examples or case studies that are associated with the discipline and work with an active awareness of global factors or trends that have an impact on specific areas of study.
O	Ethics	Locate a range of ethical issues associated with their own research or professional behaviours, and demonstrate personal responsibility for ethical choices, including adherence to professional codes in complex ethical dilemmas.
P	Placement	Not applicable
Q	Honours	Effectively plan and undertake research.

## AWARD-SPECIFIC OUTCOMES

On successful completion of the BSc/BSc (Hons) Animal Management and Science award, students will be able to:

R	Critically evaluate key scientific principles and apply knowledge to situations relating to the husbandry, behaviour and health of animals.
S	Apply practical skills to the management of domestic, captive and wild animals.
T	Appraise external factors and their potential influence on the animal management.
U	Appreciate the scientific, societal and environmental influences on animal science and be prepared to work within ethical and professional boundaries.
V	Acquire a level of understanding and knowledge in animal sciences that allows them to work as subject specialists and lead developments within animal management.

## RELATIONSHIP WITH EXTERNAL REFERENCE POINT(S)

The aims and outcomes of this Honours Degree programme reflect the level descriptors for higher education qualifications, part of the QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2014).

The award is reflected in the benchmark statements for Agriculture, Horticulture, Forestry, Food, Nutrition and Consumer Sciences (2016) and Biosciences (2015). Business and Management (2015) is also reflected, specifically in relation to finance, management and development of people, business policy and strategy, communication and information technology and customer service. In addition, the themes of sustainability and globalisation are embedded.

The College holds a regular Animal Section Technical Advisory Group and feedback from employers help to shape the curriculum from an industry perspective.

## PROFESSIONAL ACCREDITATION ARRANGEMENTS

None.

## COURSE DURATION, PROGRESSION, MODULE COMPENSATION, TRANSFER, ADVANCED STANDING AND INTERIM AWARDS

### Course Duration

The full-time programme will be completed in three years, with each academic year consisting of two semesters, each typically of 12 weeks duration, in addition to directed study weeks and examination periods.

The part-time programme will be completed in five years and typically be no less than 50% of the standard module diet of the full-time version of the award.

The maximum duration of study for full-time and part-time students (including up to one year postponement of studies) will be four years and six years respectively.

## Module Compensation Exclusions

The following modules are not eligible for compensation within the BSc/ BSc (Hons) Animal Management and Science programme:

Part 1 modules: All modules apart from Genetics and Biochemistry are eligible for compensation.

Part 2 modules: All modules are eligible for compensation.

### Honours

Part 3 modules: Dissertation is not eligible for compensation.

### Ordinary

Part 3 modules: Sustainability in Animal Industries is not eligible for compensation.

## Transfer

For transfer between courses, students may transfer all credits and marks from the cross-college core modules into the destination award. Only in the case of pre-requisites have not being met will students be required to study credit in addition to the normal study load during years two and three (Level 4 and Level 5).

Students demonstrating high level of achievement (55%+) may apply to transfer to part two of this programme from the FdSc Animal Management programme. Transfer in consultation, to assess suitability, with their Course Manager and Director of HE, is subject to study of the Level 4 Introduction to Genetics and Biochemistry module in addition to normal part two study load.

For an Ordinary Degree Animal Management and Science candidate to progress to Honours Degree they must have completed a minimum of 90 credits after re-assessment at Level 6 and achieved a mean grade of >55%.

Students eligible to progress to part three may choose to transfer to the BSc Animal Management Ordinary Degree route, in consultation with their Course Manager and subject to pre-requisites.

## Entry with Advanced Standing<sup>1</sup>

Table 4.1 in **Section 4** of the *Academic Quality Assurance Manual* identifies the maximum credit that can normally be advanced for students wishing to enter with advanced standing from a Harper Adams' award, or an award from another institution. Harper Adams' awards which qualify for the maximum volume of advanced standing into this programme are listed as follows:

Entry with Accreditation of Prior Learning (APL)/ Accreditation of Prior Experiential Learning (APEL) will be accepted in accordance with the Askham Bryan College procedure and Harper Adams University regulations. No more than  $\frac{2}{3}$  credit for the award may be derived from APL. Within this limit, no more than half of the total credit value of the award may be derived from APEL.

Holders of a matching HNC/FdSc may apply to be admitted to part two of this programme, subject to satisfaction of the admitting Course manager of their suitability for study on the programme. Students would normally have to achieve the minimum credit requirements for the award specified. Holders of a matching FdSc/HND may be admitted to part three of this programme under the same guidelines.

Interim awards which qualify for a lower level of advanced standing, including Harper Adams' awards, into this programme are listed below:

The course structure diagram(s) identify the specific study programme(s) for candidates entering with advanced standing. **Section 4.5.10** of the *Academic Quality Assurance Manual* specifies the arrangements for transfer and advanced entry and these will apply unless an alternative arrangement has been approved.

### **Interim Awards**

The requirements for interim awards associated with final awards are as follows:

#### **Certificate of Higher Education Animal Management and Science**

The outcomes required for this award are: A, B, C, D, E, F, G, H, I, J, R. Students will have obtained a minimum of 120 credits at Level 4 in accordance with the assessment regulations.

#### **Diploma of Higher Education Animal Management and Science**

The outcomes required for this award are: A, B, C, D, E, F, G, H, I, J, K, L, R. The requirements for interim awards associated with final awards are students will have obtained a minimum of 120 credits at Level 5 in accordance with the assessment regulations.

### **Ordinary Degree**

The outcomes required for this award are: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, S, T, U, and V students will have obtained a minimum of 90 credits at level 6. This will normally include a pass in the following modules core to the Ordinary Degree programme: Sustainability in Animal Industries, Behavioural Ecology, Biotechnology, Population Genetics, Recent Advances in Animal Science and Management, and in one of the optional modules: Animal Behaviour Management and Counselling, Applied Zoo and Wildlife Management and Aquatic Ecosystems Management.

Sustainability in Animal Industries takes the part of a degree review project.

Students are additionally required to complete a ten week work placement which will be awarded 30 notional P credits but not contribute to the award classification. Students will complete a log book and evaluate the skills developed

### **COURSE STRUCTURE, LEVELS AND CREDIT REQUIREMENTS FOR INTERIM AND FINAL AWARDS**

Harper Adams programmes are based on a credit-accumulation system where 1 credit represents 10 notional hours of student study time. Modules are normally 15 credits or multiples thereof. Modules are also at different levels from Levels 3 – 7, according to their intellectual challenge. Courses leading to specific awards include **core modules**, **optional modules** from which students must select choices up to the number of credits required, and, in some cases, **elective credit** whereby students may study any modules of their choice from within the Harper Adams portfolio, subject to timetabling and pre-requisite constraints, in place of optional modules, with the approval of their programme manager.

The minimum credit requirements needed to progress to interim and final awards are listed in **Section 4.4.5** of the *Academic Quality Assurance Manual*. These are reflected in the corresponding course structure study programmes, which follow.

To engage with industry, extend learning opportunities and further develop employment skills, students are required to undertake a ten week placement, which will be assessed and supported but not bear any credits towards their final award. This work based placement carries 30 notional P credits and has to be successfully passed. The notional P credits will not form part of the final award. This placement would normally be completed by the start of the second academic year of study.



Part 1 - Level 4		Part 2 - Level 5		Part 3 - Level 6	
Year 1		Year 2		Year 3	
Semester 1 Core	Semester 2 Core	Semester 1 Core	Semester 2 Core	Semester 1 Core	Semester 2 Core
Academic Skills 15 Credits		Field and Laboratory Skills 15 Credits		Dissertation 30 Credits	
Anatomy and Physiology 15 Credits		Academic Development 15 Credits			
Introduction to Business 15 Credits	Animal Behaviour 15 Credits	Epigenetics and Genetics 15 Credits	Microbiology and Parasitology 15 Credits	Research Methods 15 Credits	Biotechnology 15 Credits
Introduction to Genetics and Biochemistry 15 Credits	Animal Health 15 Credits	Animal Nutrition 15 Credits	Welfare, Legislation and Ethics 15 Credits		Population Genetics 15 Credits
Practical Animal Husbandry 15 Credits	Fundamentals of Evolutionary Ecology and Classification 15 Credits	Applied Animal Health 15 Credits			Recent Advances in Animal Science and Management 15 Credits
Semester 1 Electives	Semester 2 Electives	Semester 3 Electives	Semester 4 Choose one Electives	Semester Electives	Semester choose two Electives
			Incubation and Rearing 15 Credits	Behavioural Ecology 15 Credits	
			Collections Husbandry 15 Credits	Aquatics Ecosystem Management 15 Credits	
			Biodiversity and Restoration Ecology 15 Credits	Enclosure Design and Stock Management 15 Credits	
				Wildlife Biology 15 Credits	
*Students will normally carry out the 10 week work placement between year 1 and year 2				Sustainability in Animal Industries 15 Credits	

Full-time students will normally study at least 120 credits (equivalent to 1200 study hours) per year from a combination of core (compulsory) and optional modules. Further choice ('electives') in a language may be available within the constraints of the timetable and credit framework. Pass Degree students would normally study the Sustainability in Animal Industries Practices module as an alternative to the Final year Dissertation. **Key:** The code on the left denotes the module identifier; the number on the right denotes the credit value.

**Validation Date:** 10<sup>th</sup> January 2017

**Date of Approval following Response to Validation Report:** July 2017

**Period of Approval:** September 2017 – August 2023



Part 1 - Level 4		Part 2 - Level 5		Part 3 - Level 6	
Year 1		Year 2		Year 3	
Semester 1 Core	Semester 2 Core	Semester 1 Core	Semester 2 Core	Semester 1 Core	Semester 2 Core
Academic Skills 15 Credits		Field and Laboratory Skills 15 Credits		Sustainability in Animal Industries 15 Credits	
Anatomy and Physiology 15 Credits		Academic Development 15 Credits		Research Methods 15 Credits	Biotechnology 15 Credits
Introduction to Business 15 Credits	Animal Behaviour 15 Credits	Epigenetics and Genetics 15 Credits	Microbiology and Parasitology 15 Credits		Population Genetics 15 Credits
Introduction to Genetics and Biochemistry 15 Credits	Animal Health 15 Credits	Animal Nutrition 15 Credits	Welfare, Legislation and Ethics 15 Credits		Recent Advances in Animal Science and Management 15 Credits
Practical Animal Husbandry 15 Credits	Fundamentals of Evolutionary Ecology and Classification 15 Credits	Applied Animal Health 15 Credits			
Semester 1 Electives	Semester 2 Electives	Semester 3 Electives	Semester 4 Choose one Electives	Semester Electives	Semester choose two Electives
			Incubation and Rearing 15 Credits	Behavioural Ecology 15 Credits	
			Collections Husbandry 15 Credits	Aquatics Ecosystem 15 Credits	
			Biodiversity and Restoration Ecology 15 Credits	Enclosure Design and Stock Management 15 Credits	
				Wildlife Biology 15 Credits	
*Students will normally carry out the 10 week work placement between year 1 and year 2					

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## **COURSE DESIGN, LEARNING, TEACHING AND ASSESSMENT METHODS**

### **Assessment philosophy**

Assessments will vary to reflect the academic, practical and professional skills development of students on the BSc/BSc (Hons) Animal Management and Science programme.

### **Learning and teaching methods**

Teaching and learning methods used to deliver this curriculum are designed to provide experience, and, through reflection upon it, develop concepts which can then be explored through testing and experimentation. Methods vary according to the nature of each module's subject matter but include a wide diversity from more formal lectures to student centred activities including assignments, seminars, field trips, guest lectures and case studies. Students will be supported with their study via the College's VLE, which will prepare them for the autonomy expected of HE students.

### **Transferable skills**

The programme has been developed to enable students to plan and execute research and development work. It encourages independent learning, professional and personal development, and the ability to present skills, exams and behaviour appropriate to a management career. The programme includes activities to develop core skills of communication, numeracy, IT and personal development planning as well as modules designed to develop teamwork and independent learning, problem solving and research (Dissertation, Research Methods and Sustainability in the Animal Industry). Practical work experience during directed study time is also recommended so that students can apply information and skills to real life situations.

### **Typical assessment**

Assessment is considered an important part of the learning process. Typically, modules are assessed by two pieces of assessment, although this may vary. The first will provide formative in-course feedback and the second provides a summative end-of module assessment; each contributing 50% to the weighted mean module work. The exact details are specified in each module descriptor. Unless otherwise specified in module descriptors the overall mark is derived from a weighted mean, with no threshold requirement in any assessment component. Formative assessment methods are diverse and include literature review-based essays, problem based assignments, oral presentations and business written reports, individual and team scenario exercises, experimental work and placement assignments. Time constrained assessment includes closed and open book assessment, with both seen and unseen questions and tasks set.

Group assessment includes group collection of both quantitative and qualitative data and information to facilitate decision-making. Practical assessment will include the design and set-up of laboratory or field experiments, with analysis and presentation of collected data. Further assessment is facilitated by case studies and links with industry, including product evaluation.

## **ENTRANCE REQUIREMENTS**

Applicants will normally have 5 GCSE's at Grade C or above including English, Maths and Science. Achievements at level 2 in appropriate Functional Skills will also be considered as an alternative for English and Maths and Merit grades or above in Science based modules at Level 3 can be used as an alternative to GCSE Science.

Applicants are expected to achieve a minimum of 84 UCAS points.

Applicants will normally have studied a two year level 3 programme at A Level, to include Biology, or a vocational Level 3 Diploma. Normally applicants will be expected to show achievements in science modules at Merit grade or above in vocational programmes. This reflects the science based nature of the programmes.

Applicants without appropriate achievements in Science may be asked to undertake an assessment of scientific knowledge.

Applications from those that have significant life or work experience after leaving compulsory education will normally have studied and achieved an Access to HE course or successfully completed a minimum of a one year level 3 courses and/or be able to demonstrate that they are working at an appropriate level in English, Maths and Science through an assessment process.

## Curriculum Map for BSc/BSc (Hons) Animal Management and Science (Level 4, 5, 6)

	<b>Award Outcomes</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	<b>O</b>	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>V</b>		
<b>LEVEL 4</b>	Academic Skills					X	X		X	X		X	X												
	Introduction to Business		X		X		X	X				X			X	X									
	Anatomy and Physiology	X									X									X					
	Animal Health	X	X		X	X									X	X				X		X	X		
	Fundamentals of Evolutionary Ecology and Classification	X	X	X						X			X												
	Animal Behaviour			X	X						X	X								X					
	Introduction to Genetics and Biochemistry	X			X	X	X				X		X												
	Practical Animal Husbandry	X				X			X	X	X		X	X	X		X				X				
<b>LEVEL 5</b>	Applied Animal Health	X				X	X					X													
	Academic Development		X	X			X				X														
	Microbiology and Parasitology		X				X			X	X														
	Animal Nutrition	X			X								X							X					
	Welfare, Legislation and Ethics	X			X	X							X		X	X				X		X	X		
	Field and Laboratory Skills		X	X	X	X		X			X														
	Epigenetics and Genetics						X				X		X												
	Incubation and Rearing	X				X			X				X				X								
	Collections Husbandry						X	X		X					X						X	X	X		
<b>LEVEL 6</b>	Biodiversity and Restoration Ecology	X				X							X	X	X	X					X	X			
	Biotechnology	X							X		X				X										
	Dissertation			X								X	X			X		X							
	Population Genetics	X				X		X			X														
	Recent Advances in Animal Science and Management				X		X			X			X	X	X							X			
	Research Methods			X			X						X			X									
	Behavioural Ecology										X	X								X	X				
	Aquatics Ecosystem	X				X		X													X	X			
	Enclosure Design and Stock Management	X	X		X															X	X		X		
Wildlife Biology		X		X			X		X						X										
Sustainability in Animal Industries				X	X				X			X	X	X		X									

## Level 4

A	Knowledge	Identify and describe key theories, ideas and terminology associated with the discipline.
B	Problem Solve	Solve straightforward, routine or predictable problems using strategies that are specified.
C	Analysis	Analyse data or ideas using specified procedures to generate usable findings.
D	Synthesis	Categorise information and draw on multiple sources to fulfil a specified purpose.
E	Evaluation	Review information in a balanced manner, using specified methods to fulfil a given purpose.
F	Digital Competence	Use technologies to enable or enhance the performance of specific tasks and demonstrate a commitment to developing appropriate digital competencies.
G	Team Work	Work with others to meet specified objectives and fulfil personal goals.
H	Career Develop	Recognise how learning within their programme links to future careers and identify the knowledge, skills and attributes associated with different relevant professions.
I	Communications	Communicate clearly to convey an understandable message in relation to specific tasks and audiences.
J	Practical Comp	Perform practical operations in predictable, routine situations that require the application of specified procedures.
K	Autonomy	Take responsibility for studies and self-development with guidance and support. Use the resources available to help learning.
L	Research	Recognise that research can generate theory and ideas that are used in practice.
M	Sustain Practice	Recognise the meaning and importance of sustainable practice, and identify some of the ways that sustainable practice manifests.
N	Global	Identify a range of international examples or case studies that are associated with the discipline.
O	Ethics	Recognise some ethical challenges and appreciate the need or personal responsibility.
P	Placement	Not applicable
Q	Honours	Not applicable
R		Critically evaluate key scientific principles and apply knowledge to situations relating to the husbandry, behaviour and health of animals.
S		Apply practical skills to the management of domestic, captive and wild animals
T		Appraise external factors and their potential influence on the animal management
U		Appreciate the scientific, societal and environmental influences on animal science and be prepared to work within ethical and professional boundaries.

## Level 5

A	Knowledge	Demonstrate a detailed knowledge of key theories, ideas and terminology associated with the discipline, with some appreciation of how knowledge is developed and used in practice.
B	Problem Solve	Select and use strategies to solve problems that are complex or unpredictable
C	Analysis	Analyse data using recognisable principles or approaches, and draw out specific findings from this process with some awareness of the limitations of the approach.
D	Synthesis	Compare and contrast ideas and/or data to strengthen evidence or arguments towards a specified purpose.
E	Evaluation	Review information using selected methods to address complex issues or problems, with an awareness of some of the limitations of the source material
F	Digital Competence	Select and use appropriate technologies to enable or enhance the performance of specific tasks, and appreciate the role information and communication technologies play in the discipline or relevant professions.
G	Team Work	Work productively with others on negotiated tasks and evaluate team performance with reference to some of the internal and external factors affecting success
H	Career Dev	Recognise, pursue and record personal development in a way that supports the needs of relevant professional employers.
I	Communications	Communicate effectively through different media and genre, for specialist and non-specialist audiences.
J	Practical Comp	Perform practical operations in more complex or unpredictable situations that require the selection and application of appropriate skills and review personal effectiveness in practical tasks.
K	Autonomy	Work independently and autonomously with only some supervision in academic and practical tasks; make decisions about when support is needed.
L	Research	Use research to inform the development of knowledge and understanding, and to inform decision-making.
M	Sustain Practice	Recognise the complexity of sustainable practice, and assess the sustainability of different practices, processes and/or developments.
N	Global	Compare and contrast international examples or case studies that are associated with the discipline and identify global factors or trends that have an

		impact on specific areas of study.
O	Ethics	Recognise some ethical challenges associated with research and within professional behaviour, and appreciate the role of personal responsibility and professional codes in complex ethical dilemmas
P	Placement	Not applicable
Q	Honours	Not applicable
R		Critically evaluate key scientific principles and apply knowledge to situations relating to the husbandry, behaviour and health of animals
S		Apply practical skills to the management of domestic, captive and wild animals
T		Appraise external factors and their potential influence on the animal management
U		Appreciate the scientific, societal and environmental influences on animal science and be prepared to work within ethical and professional boundaries.

## Level 6

A	Knowledge	Demonstrate a detailed and specialised knowledge of a range of theories, ideas, terminology and contexts associated with the discipline, with a clear appreciation of the ways in which knowledge is developed and the provisional nature of knowledge.
B	Problem Solve	Select, devise and evaluate the use of appropriate strategies to solve complex, unpredictable, ambiguous and real-world problems.
C	Analysis	Analyse complex data using appropriately selected techniques; draw out robust findings in this process; and, thoroughly evaluate the effectiveness of the analytical strategy.
D	Synthesis	Select and combine ideas and/or data to generate meaningful and convincing composite evidence or arguments with a clear purpose.
E	Evaluation	Review complex and unpredictable information to address unpredictable, ambiguous or real-world problems, with a good awareness of the limitations of both the material under review and the analytical approach.
F	Digital Competence	Select, use and evaluate technologies to enable or enhance the performance of specific tasks, and appreciate the evolution of technology in their discipline.
G	Team Work	Work effectively with others, with minimal or no supervision, to achieve positive outcomes; demonstrate leadership and management capabilities within a team situation; and, critically assess their personal contribution to the team.
H	Career Dev	Recognise, pursue, record and reflect on personal development to pursue personal career goals and appreciate the changing nature of the workplace and the need for personal resilience and lifelong learning.
I	Communications	Communicate effectively and professionally for a range of different purposes and through different modes, with consideration of audience needs as well as other contextual factors such as commercial sensitivity, impact maximisation and accessibility requirements.
J	Practical Comp	Perform practical operations in complex, unpredictable, real-world situations that require the selection of combined or novel practical skills and critically review personal effectiveness in practical tasks with reference to relevant professional standards.
K	Autonomy	Act independently and autonomously with minimum supervision in academic and practical tasks.
L	Research	Select and use research to inform the development of knowledge and understanding, and to inform decision-making.
M	Sustain Practice	Evaluate the sustainability of practices, processes or developments, with attention to different stakeholder perspectives, unintended consequences, economic and social dimensions, or environmental considerations.
N	Global	Compare and contrast international examples or case studies that are associated with the discipline and work with an active awareness of global factors or trends that have an impact on specific areas of study.
O	Ethics	Locate a range of ethical issues associated with their own research or professional behaviours, and demonstrate personal responsibility for ethical choices, including adherence to professional codes in complex ethical dilemmas.
P	Placement	Not applicable
Q	Honours	Effectively plan and undertake research.
R		Critically evaluate key scientific principles and apply knowledge to situations relating to the husbandry, behaviour and health of animals
S		Apply practical skills to the management of domestic, captive and wild animals
T		Appraise external factors and their potential influence on the animal management
U		Appreciate the scientific, societal and environmental influences on animal science and be prepared to work within ethical and professional boundaries
V		Demonstrate a level of understanding and knowledge in animal sciences that allows them to work as subject specialists and lead developments within animal management.

