Definitive Programme Document: **Animal Conservation, Behaviour and Welfare** (Bachelor's with Honours)

Awarding institution	Bath Spa University
Teaching institution	University Centre Weston (UCW)
School	School of Sciences
Main campus	Knightstone Campus
Other sites of delivery	Puxton Park
Other Schools involved in delivery	N/A
Name of award(s)	Animal Conservation, Behaviour and Welfare
Qualification (final award)	BSc (Hons)
Intermediate awards available	CertHE, DipHE
Routes available	Single
Professional Placement Year	No
Duration of award	3 years full-time
Modes of delivery offered	campus-based,
Regulatory Scheme[1]	Undergraduate Academic Framework
Exemptions from regulations/framework[2]	Yes
Professional, Statutory and Regulatory Body accreditation	N/A
Date of most recent PSRB approval (month and year)	N/A
Renewal of PSRB approval due (month and year)	N/A
UCAS code	Course code: ACBW Institution code: W47
Route code (SITS)	
Relevant QAA Subject Benchmark Statements (including date of publication)	Biosciences (2019)
Date of most recent approval	March 2023
Date specification last updated	

Exemptions

The following exemptions are in place:

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[1] This should also be read in conjunction with the University's Qualifications Framework

[2] See section on 'Exemptions'

Programme/Pathway	Regulations/Framework	Brief description of variance	Approving body and date
BSc (Hons) Animal Conservation, Behaviour and Welfare	Undergraduate Academic Framework	To enable a mixture of 20 and 40 credit modules to be in both levels 4 and 5 at UCW to meet the needs of the students.	Undergraduate Academic Framework

Programme Overview

This programme will enable you to become skilled and qualified in the fields of animal management, conservation science, behaviour and welfare. You will examine the scientific principles and impact of conservation practices and how they promote natural animal behaviour. The ethics and motivations behind activities such as poaching, trophy hunting and breeding for sports will be explored. Your professional practice will be developed using a wide range of species to enable the application of theory to practical situations such as behaviour monitoring and assessment and welfare standards This course will equip you with the scientific knowledge and practical skills for a range of areas within the animal industry focusing on: conservation biology; ecology; animal ethics; welfare and behaviour and your professional practice (including animal husbandry).

Professional development will be embedded throughout the programme to enable students to have a fully developed skills set upon entering the animal management industry. Professional development will encompass practical skills development, graduate skills development and transferable skills development.

The unique selling point of this programme incorporates the strong partnership University Centre Weston has developed with Puxton Park. Students will experience a practical provision that is an active working business. In addition to this, Puxton Park have a wide range of species held for conservation projects, agricultural and domestic purposes, providing students with the opportunity to work with a variety of species in a range of contexts.

Programme Aims

1 To produce graduates with knowledge and understanding of the social, cultural and economic considerations within animal conservation, behaviour and welfare fields.

2 To create professional graduates with the practical, and reflective skills which are required to work in the animal conservation, behaviour and welfare fields.

3 To embed a research and enquiry ethos enabling the betterment of conservation programmes.

4 To produce graduates with a deeper understanding of the purposes and requirements of regulatory and legislative framework for animal conservation, behaviour, and welfare.

5 To provide graduates with subject specific transferable skills that apply to an evolving employment sector and lifelong learning.

6 To offer a bespoke approach to learning and skill enhancement through work-based learning

7 To enable graduates to make a significant contribution in the fields of animal conservation, behaviour or welfare

Programme Intended Learning Outcomes (ILOs)

A Subject-Specific Skills and Knowledge

	Programme Intended Learning Outcomes (ILOs) On Achieving Level 6	On Achieving Level 5	On Achieving Level 4
A1	A systematic understanding of the theories and principles underpinning the complexities of animal conservation, behaviour and welfare	A critical understanding of the theories and principles of animal conservation, behaviour and welfare	Knowledge of the theories and principles underpinning animal conservation, behaviour and welfare
A2	Accurately deploy established techniques of enquiry in the field of animal conservation, behaviour and Welfare research, and an ability to apply methods to their own research and evaluate them	A critical understanding of the main methods of enquiry in animal conservation, behaviour and welfare research and an ability to apply methods to their own research and evaluate them	Knowledge and understanding of the main methods of enquiry in animal conservation, behaviour and welfare research.
A3	Critical evaluation of behaviour observations and their application to conservation programmes and population management	Interpretation of behavioural observations and how these could influence population management	Knowledge and understanding of animal behaviour its interpretation and population management
A4	Critical appraisal of the utilisation of cultural practices enabling beneficial outcomes in population management	Critical understanding of the rationale behind the practices and measures taken to manage populations	Knowledge of cultural practices relating to animal population management
A5	Critically analyse and appraise the impact of	Critically evaluate the impact of animal management strategies on animal welfare	Knowledge and understanding of animal management methods and

	animal management strategies on animal welfare		their influence on animal welfare
A6	Ability to accurately deploy established analysis methods for data sets compiled from the animal management sector.	Critical understanding of the utilisation of analytical techniques applied to data from the animal management sector.	Knowledge and understanding of analytical techniques applied to data from the animal management sector.
A7	A conceptual understanding of the efficacy of handling techniques enabling demonstration of a high level of competence in animal handling and welfare assessments, including the ability to make decisions and solve problems in complex or unpredictable situations.	Ability to apply knowledge to select and utilise appropriate animal handling and husbandry techniques with consideration of animal welfare for relevant species within an employment context	Knowledge of animal handling, husbandry and welfare for a range of species.

B Cognitive and Intellectual Skills

	Programme Intended Learning Outcomes (ILOs) On Achieving Level 6	On Achieving Level 5	On Achieving Level 4
B1	Critically evaluate and apply concepts, theories, research and issues of policy in relation to animal conservation, behaviour and welfare	Critically evaluate concepts, theories, research and issues of policy in relation to animal conservation, behaviour and welfare	Knowledge of concepts, theories, research and issues of policy in relation to animal conservation, behaviour and welfare
B2	A systematic understanding, identification and evaluation of trustworthy primary and secondary sources within animal conservation, behaviour and welfare, to extend knowledge and understanding, and to apply the concept to their own research	Ability to identify and evaluate trustworthy primary and secondary sources within animal conservation, behaviour and welfare, to extend knowledge and understanding, and to apply the concept to their own research	Ability to identify and evaluate trustworthy primary and secondary sources within animal conservation, behaviour and welfare, to extend knowledge and understanding
B3	Ability to demonstrate a conceptual understanding of the importance of ethical collection, application and analysis of data, including	Ability to demonstrate a critical understanding of the importance of ethical collection, application and analysis of data within animal	Ability to demonstrate an awareness of the importance of ethical collection, application and analysis of data within animal

	being able to articulate justifications within their own research within animal conservation, behaviour and welfare	conservation, behaviour and welfare	conservation, behaviour and welfare
B4	The ability to critically evaluate the role of behaviour and welfare considerations within conservation programme design	Ability to demonstrate a critical understanding of the importance of behaviour and welfare considerations within conservation.	Ability to demonstrate an awareness of the importance of behaviour and welfare considerations within conservation.

C Skills for Life and Work

	Programme Intended Learning Outcomes (ILOs) On Achieving Level 6	On Achieving Level 5	On Achieving Level 4
C1	Autonomous learning[3] (including time management) that shows the exercise of initiative and personal responsibility and enables decision-making in complex and unpredictable contexts.	Autonomous learning (including time management) as would be necessary for employment requiring the exercise of personal responsibility and decision-making such that significant responsibility within organisations could be assumed.	Autonomous learning (including time management) as would be necessary for employment requiring the exercise of personal responsibility.
C2	Team working skills necessary to flourish in the global workplace with an ability both to work in and lead teams effectively.	Team work as would be necessary for employment requiring the exercise of personal responsibility and decision-making for effective work with others such that significant responsibility within organisations could be assumed.	Team work as would be necessary for employment requiring the exercise of personal responsibility for effective work with others.
C3	Communication skills that ensure information,	Communication skills commensurate with the	Communication skills that demonstrate an

[3] i.e. the ability to review, direct and manage one's own workload

	ideas, problems and solutions are communicated effectively and clearly to both specialist and non-specialist audiences.	effective communication of information, arguments and analysis in a variety of forms to specialist and non-specialist audiences in which key techniques of the discipline are deployed effectively.	ability to communicate outcomes accurately and reliably and with structured and coherent arguments.
C4	IT skills and digital literacy that demonstrate core competences and are commensurate with an ability to work at the interface of creativity and new technologies.	IT skills and digital literacy that demonstrate the development of existing skills and the acquisition of new competences.	IT skills and digital literacy that provide a platform from which further training can be undertaken to enable development of new skills within a structured and managed environment.

Programme content

This programme comprises the following modules

Key:
Core = C
Required = R
Required* = R*
Optional = O
Not available for this status = N/A
If a particular status is greyed out, it is not offered for this programme.

[Name of subject]				Status	
Level	Code	Title	Credits	Single	Joint
4	CON4000-20	Animal Biology and reproduction	20	C	
4	CON4001-20	Working in the Animal Industry	40	C	
4	CON4002-20	Introduction to Ecology and Conservation	20	C	
4	CON4003-20	Applied Animal Behaviour	20	C	
4	CON4004-20	Introduction to Animal Welfare.	20	C	
5	CON5000-20	Research Methods	20	C	

5	CON5001-20	Conservation Genetics	20	C	
5	CON5002-40	Professional Practice in the Animal Industry	40	C	
5	CON5003-20	Animal Welfare and Ethics	20	C	
5	CON5004-20	Biodiversity and sampling techniques	20	C	
6	CON6000-20	Data Analysis and Conservation	20	C	
6	CON6001-20	Environmental extremes and diversity of life	20	C	
6	CON6002-20	Conservation and wildlife management	20	C	
6	CON6003-40	Dissertation	40	C	
6	CON6004-20	Behavioural ecology in conservation	20	C	

Assessment methods

A range of summative assessment tasks will be used to test the Intended Learning Outcomes in each module. These are indicated in the attached assessment map which shows which tasks are used in which modules.

Students will be supported in their development towards summative assessment by appropriate formative exercises.

Work experience and placement opportunities

The work experience and placement opportunities available to students consist of a range of businesses functioning in the animal industry, focusing on the sectors of animal husbandry, behaviour, welfare and conservation. Customer facing establishments within the animal management industry will underpin the knowledge and understanding gained in theoretical settings. Modules that will incorporate development of professional practice are Working in the Animal Industry, Professional Practice in the Animal Industry, Conservation and Wildlife Management, Applied Animal Behaviour and Animal Welfare and Ethics.

Graduate Attributes

	Bath Spa Graduates…	In the BSc (Hons) Animal Conservation, Behaviour and Welfare we enable this…
1	Will be employable: equipped with the skills necessary to flourish in the global workplace, able to work in and lead teams	By embedding employability within the programme, we develop your skills to flourish in the global and professional workplace. You are required to undertake

		placements within a professional conservation, welfare or behaviour setting, and you are assessed against a range of employment focused criteria.
2	Will be able to understand and manage complexity, diversity and change	By having the belief that conservation, welfare or behaviour is about change and we will challenge you to change and develop your ideas, attitudes, skills and knowledge as part of this course.
3	Will be creative: able to innovate and to solve problems by working across disciplines as professional or artistic practitioners	As conservation, welfare or behaviour professionals are creative ones and as such you will have the opportunity to explore your own creativity. You will also take study modules that encourage problem solving and give you the opportunity to work across academic and professional disciplines.
4	Will be digitally literate: able to work at the interface of creativity and technology	Aiming to build your existing skills as a 'digital learner' so that you can benefit from technology to its fullest extent. You will become a confident user of digital technologies in your own learning by using online learning environments, such as teams. You will have the opportunity to develop creative work using technology as part of your assessments.
5	Will be internationally networked: either by studying abroad for part of the their programme, or studying alongside students from overseas	Ensuring that this programme equips you to understand and engage with conservation, welfare or behaviour issues in the UK and internationally. The curriculum presents an international perspective on conservation, welfare or behaviour issues throughout the three years.
6	Will be creative thinkers, doers and makers	Developing your knowledge and understanding of conservation, welfare or behaviour, but it also gives you opportunities, through placements, study visits and creative assessments, to develop your practice and your professionalism.
7	Will be critical thinkers: able to express their ideas in written and oral form, and possessing information literacy	By the development of critical thinking skills is embedded in the curriculum from the very start of the programme where you will be introduced to philosophical debates around the purposes and challenges of conservation, welfare or behaviour. The modules will encourage you to consider

		issues from a range of perspectives and will develop your skills to express your ideas clearly in oral and written form.
8	Will be ethically aware: prepared for citizenship in a local, national and global context	By believing that conservation, welfare or behaviour is about change and we provide you with opportunities to develop your personal values and beliefs about education. You will rigorously examine and defend these values against a framework of ethical behaviours and have the opportunity to consider the ethics of research.

Modifications

Module-level modifications

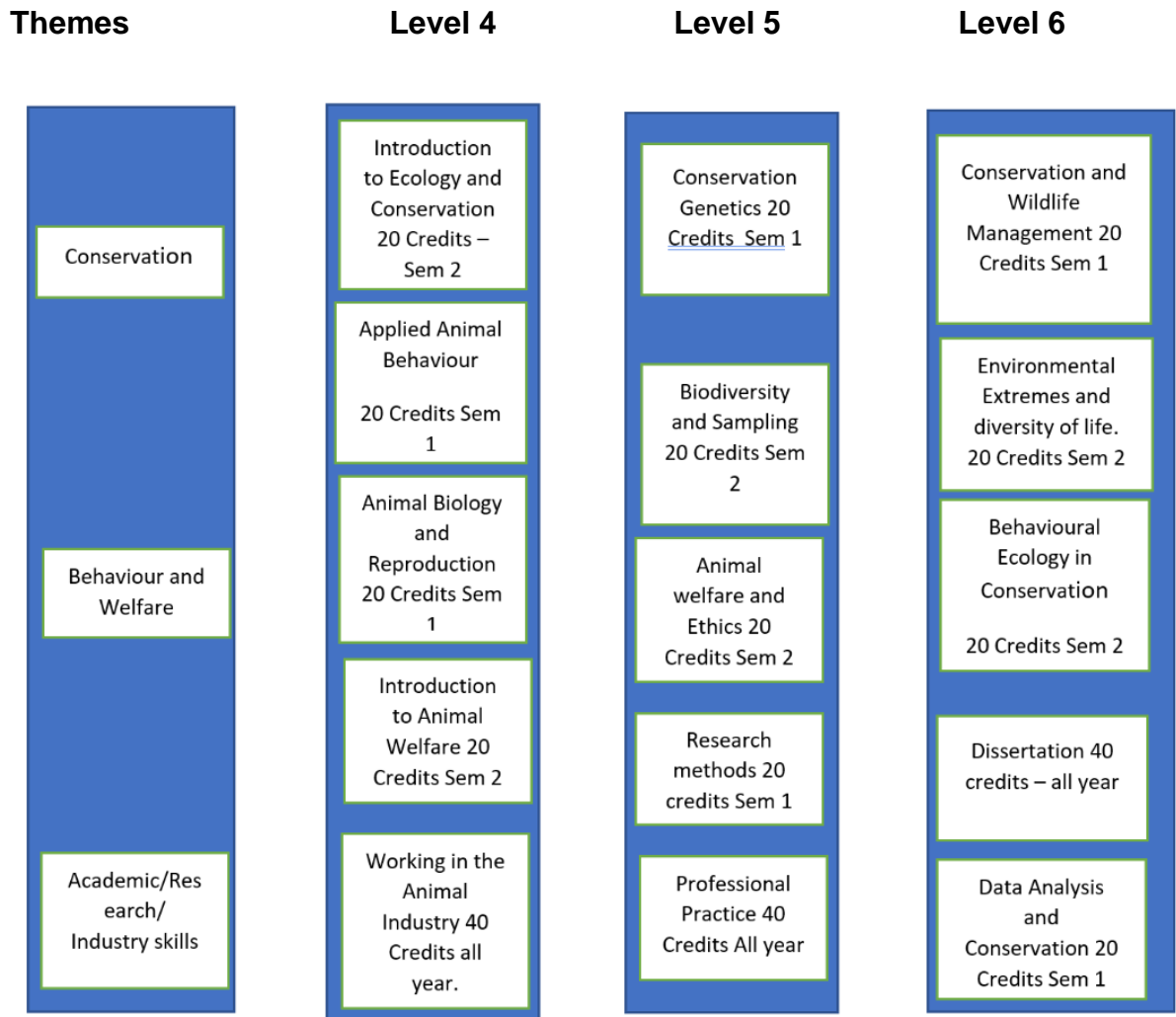| Code	Title	Nature of modification	Date(s) of approval and approving bodies	Date modification comes into effect

Programme-level modifications

Nature of modification	Date(s) of approval and approving bodies	Date modification comes into effect

Attached as appendices:
1. Programme structure diagram
2. Map of module outcomes to level/programme outcomes
3. Assessment map
4. Module descriptors

Appendix 1: Programme Structure

Themes	Level 4	Level 5	Level 6
Conservation	Introduction to Ecology and Conservation 20 Credits – Sem 2	Conservation Genetics 20 Credits Sem 1	Conservation and Wildlife Management 20 Credits Sem 1
	Applied Animal Behaviour 20 Credits Sem 1	Biodiversity and Sampling 20 Credits Sem 2	Environmental Extremes and diversity of life. 20 Credits Sem 2
Behaviour and Welfare	Animal Biology and Reproduction 20 Credits Sem 1	Animal welfare and Ethics 20 Credits Sem 2	Behavioural Ecology in Conservation 20 Credits Sem 2
	Introduction to Animal Welfare 20 Credits Sem 2	Research methods 20 credits Sem 1	Dissertation 40 credits – all year
Academic/Research/Industry skills	Working in the Animal Industry 40 Credits all year.	Professional Practice 40 Credits All year	Data Analysis and Conservation 20 Credits Sem 1

Map of Intended Learning Outcomes (ILOs) against modules [Programme title, including final award designation]

Please indicate (x) in the relevant boxes the modules in which level/programme Intended Learning Outcomes are being assessed.

(Note: not all modules will be expected to align with all ILOs for the level; rather, in designing each level of the programme, thought should be given to how the overall diet enables a student to meet all of the ILOs.)

(The number of columns can be adjusted to accommodate the ILOs as set out in the Programme Specification section of the Definitive Programme Document.)

Level	Module Code	Module Title	Status (C,R,R*,O)[4]	Subject-specific Skills and Knowledge							Cognitive and Intellectual Skills					Skills for Life and Work			
				A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	C1	C2	C3	C4
4	CON4000-20	Animal Biology and reproduction	C	**X**				X				X		X		X		X	X
4	CON4001-20	Working in the Animal Industry	C	X				X		X	X				X	X	X	X	
4	CON4002-20	Introduction to Ecology and Conservation	C	X	X		X		X		X	X	X	X		X		X	X
4	CON4003-20	Applied Animal Behaviour	C	X	X	X		X	X		X	X	X		X	X		X	X
4	CON4004-20	Introduction to Animal Welfare.	C	X	X	X	X	X	X		X	X	X	X		X		X	
5	CON5000-20	Research Methods	C	X	X		X	X	X			X	X			X		X	

[4] C = Core; R = Required; R* = Required*; O = Optional

Level	Code	Title	C/O	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5	CON5001-20	Conservation Genetics	C	X	X		X	X	X		X	X	X			X	**X**	X	X
5	CON5002-40	Professional Practice in the Animal Industry	C	X				X		X	X			X	X	X	X	X	
5	CON5003-20	Animal Welfare and Ethics	C	X	X			X			X	X	X	X		X		X	
5	CON5004-20	Biodiversity and sampling techniques	C	X	X		X		X		X	X	X			X	X		X	X
6	CON6000-20	Data Analysis and Conservation	C	X	X				X			X	X			X		X	X
6	CON6001-20	Environmental extremes and diversity of life	C	X									X		X		X		X	X
6	CON6002-20	Conservation and wildlife management	C	X		X				X	X	X	X	X		X		X	X
6	CON6003-40	Dissertation	C	X	X			**X**	X		X	X	X			X		X	X
6	CON6004-20	Behavioural ecology and conservation	C	X		X	X	X	X		X	X	X	X	X	X	X	X	

Map of summative assessment tasks by module
BSc (Hons) Animal Conservation, Behaviour and Welfare.

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Level	Module Code	Module Title	Status (C,R,R*,O) [5]	Assessment method													
				Coursework						Practical					Written Examination		
				Composition	Dissertation	Essay	Journal	Portfolio	Report	Performance	Practical Project	Practical skills	Presentation	Set exercises	Written Examination	In-class test (seen)	In-class test (unseen)
4	CON4000-20	Animal Biology and reproduction	C						X 2000 words 50%								X 60 mins 50%
4	CON4001-20	Working in the Animal Industry	C					X 50%					X 20 mins 50%				
4	CON4002-20	Introduction to Ecology and Conservation	C										X 20 mins 100%				
4	CON4003-20	Applied Animal Behaviour	C						X				X 10 min 40%				

[5] C = Core; R = Required; R* = Required*; O = Optional

								2000 words 60%							
4	CON4004-20	Introduction to Animal Welfare.	C			X 2500 words 70%					X 10 mins 30%				
5	CON5000-20	Research Methods	C					X 3000 words 60%							X 40%
5	CON5001-20	Conservation Genetics	C					X 2500 words 50%							X 50%
5	CON5002-40	Professional Practice in the Animal Industry	C							X 50%	X 30 mins 50%				
5	CON5003-20	Animal Welfare and Ethics	C								X 30 mins 100%				
5	CON5004-20	Biodiversity and sampling techniques	C				X 2500 (words) 50%	X 50%							
6	CON6000-20	Data Analysis and Conservation	C				X (5000 words) 100%								
6	CON6001-20	Environmental extremes and diversity of life	C								X 30 mins 100%				

6	CON6002-20	Conservation and wildlife management	C						X 3000 words 75%	X 25%							
6	CON6003-40	Dissertation	C		X													
6	CON6004-20	Behavioural ecology and conservation	C	X 5000 words 100%														

Module Descriptor Template

(table will expand as necessary)

1.	Module code	CON4004-20			
2.	Module title	Introduction to Animal Welfare			
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare			
4.	Core, Required or Required* for	Core			
5.	Level	4			
6.	UK credits	20			
7.	ECTS credits	10			
8.	Optional for	NA			
9.	Excluded combinations	NA			
10.	Pre-requisite or co-requisite	NA			
11.	Class contact time: total hours	60 hours			
12.	Independent study time: total hours	140			
13.	Semester(s) of delivery	2			
14.	Main campus location	University Centre Weston			
15.	Module co-ordinator	Gill Cook			
16.	Additional costs involved	NA			
17.	Brief description and aims of module This module aims to enable an understanding of animal welfare in a range of captive settings and appraisal of allocated practices. The impact of welfare on behaviour (normal and abnormal) will be explored and possible solutions uncovered. Comparison between welfare and housing systems in the UK and abroad will be examined in a range of situations e.g., farm, companion, laboratory and exhibited animals.				
18.	Outline syllabus Definitions of 'animal welfare' and significance of animal welfare and effect of physical and mental stress, national/international legislation relevant to animal welfare and standards of welfare in the UK and abroad. Influence of different housing and production systems upon animal welfare, causal factors, welfare issues, proposed solutions (to include companion, farm, laboratory, exhibited animals). Animal welfare and abnormal behaviours; development, identification, diagnosis and treatment Within this module you will have the opportunity to develop your research and IT skills through undertaking online research with both academic databases such as JStor and ebsco. The skills developed here will form part of your lifelong learning skill set and will be further developed at different stages of the programme.				

19.	Teaching and learning activities	
	Scheduled learning	
	Includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop.	
	Independent learning	
	Includes the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.	
	Virtual learning environment (VLE)	
	This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.	

20.	Intended learning outcomes	*How assessed*
	By successful completion of the module, you will be able to :	
	1. Demonstrate knowledge of the impact that stress, and the animal's responses to stress, have on animal welfare	*F2, S1, S2*
	2. Evaluate the effectiveness of current national and/or international legislation regulating animal welfare – to include welfare standards in different countries	*S1, S2*
	3. Demonstrate knowledge and understanding of the causal factors for welfare issues, within animal housing systems	*F1, S1, S2*
	4. Demonstrate knowledge and understanding of the causal factors and characteristics of abnormal behaviour and its relationship to welfare	*F2, S1, S2*

21.	Assessment and feedback	
	Formative exercises and tasks:	
	F1. Accommodation appraisal	
	F2. Ethogram and behavioural appraisal with link to current welfare standards regarding environment	
	Summative assessments:	Weighting
	S1. Verbal discussion in preparation of essay (10 mins)	30%
	S2. Essay (2500 words)	70%

22.	Learning resources	
	University Library print, electronic resources and Minerva:	
	Key texts	
	Appleby, M. C., Hughes, B. O., Mench, J. A., Olsson, A. (eds.) (current edition) *Animal welfare.* Wallingford: CAB International.	
	Broom, D.M. and Fraser, A.F. (eds.) (current edition) *Domestic animal behaviour and welfare* (Current edition). Wallingford: CAB International.	

	Webster, J. (current edition) *Animal welfare - limping towards Eden*. Oxford: Blackwell. Webster, J. (current edition) *Management and welfare of farm animals: the UFAW farm handbook.* Oxford: Blackwell *Key web-based and electronic resources* ● Science Direct ● DEFRA ● LANTRA ● British Horse Society ● Animal Health Trust ● Journals relating to animal behaviour and welfare ● Farm Animal Welfare Council www.fawc.org.uk ● Universities Federation for Animal Welfare www.ufaw.org.uk
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON4001-20
2.	Module title	Working in the Animal Industry
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	4			
6.	UK credits	40
7.	ECTS credits	20
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	120 hours
12.	Independent study time: total hours	180
13.	Semester(s) of delivery	1 and 2
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA
17.	Brief description and aims of module The module is based around the development of issued practical skills which are then performed and assessed in the workplace or via in-class formative assessments. Workplace hours for the programme are to equate to 140 hours, a minimum of 50 hours is required when studying at level 4. Reflection of performance and development will be achieved with application theory to practical evidence.	
18.	Outline syllabus Introduction to the animal industry and working in an animal management environment with knowledge and application of relevant health and safety. Competently handle a range of species to include mammals and exotic species, including an awareness of behaviour and methods of restraint. Management principles and methods (handling, equipment, housing, watering, feeding, bedding) for a range of species to a competent level. Legislation for example; Veterinary Surgeons Act 1996, Animal Welfare Act 2006, Wildlife and Countryside Act 1984, Import and Export legislation.	
19.	Teaching and learning activities **Scheduled learning** Includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. **Independent learning** Includes the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an	

	average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make. **Virtual learning environment (VLE) (or equivalent)** This module is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE. **Work based learning** In this module there is a requirement to complete a minimum of 50 hours of work-based learning with a University Centre Weston approved and recognised animal establishment. This will be supported by a named mentor and regular monitoring of work placement performance by a member of the team to support and develop professional practice.	

20.	Intended learning outcomes
	By successful completion of the module, you will be able to:
	    1. Demonstrate knowledge and understanding of animal practice principles
	    2. Demonstrate knowledge and understanding of the management strategies employed within animal husbandry when performing a range of practical tasks.
	    3. Communicate technical information effectively to a range of audiences
	    4. Demonstrate knowledge and understanding of current legislation relating to domestic and wild animals within the United Kingdom
		How assessed
		  F1, S1, S2
		
		F1, S1
		
		F1, F2, S1, S2
		
		F1, S2

21.	Assessment and feedback *Formative exercises and tasks:* F1. Interim assessments of mandatory competencies F2. Reflective writing task using models of reflection	
	Summative assessments: S1. Reflective Portfolio - workplace logbook demonstrating minimum of 50 hours work placement with completed employer and self-assessment form. To include evidence of competency and reflection of own skills and own development needs S2. Presentation (20 minutes)	Weighting 50% 50%
22.	Learning resources *University Library print, electronic resources and Minerva:* *Key texts*	

	Agar, S. (current edition) *Small animal nutrition.* Edinburgh: Butterworth Heinemann. Boden, E. (current edition) *Black's veterinary dictionary*. London: A & C Black. Dallas, S. North, D. and Angus, J. (current edition) *Grooming manual for the dog and cat*. Oxford: Blackwell Publishing. Ford, P. (current edition) *Home farm handbook*. New York: Barron Educational Services. Lane, D. Cooper, B. and Turner, L. (current edition) *BSAVA textbook of veterinary nursing*. Gloucester: BSAVA. Manning, A. (current edition) *Introduction to animal behaviour*. Oxford: Marion Stamp Dawkins. Meredith A. and Redrobe, S (current edition) *BSAVA manual of exotic pets*. Gloucester: BSAVA. Pond, W. Church, D. Pond, K. and Schoknecht, P. (current edition) *Basic animal nutrition and feeding*. Oxford: Wiley and Sons. Poole, T. (current edition) *UFAW handbook on the care and management of laboratory animals: Terrestrial Vertebrates*. Oxford: Blackwell Publishing. Young, R.B. (current edition) *Environmental enrichment for captive animals*. Oxford: Blackwell Publishing. *Key web-based and electronic resources* - Science Direct - DEFRA - LANTRA - British Horse Society - Animal Health Trust
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their practical skills are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON4000-20			
2.	Module title	Animal Biology and Reproduction			
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare			
4.	Core, Required or Required* for	Core			
5.	Level	4			
6.	UK credits	20			
7.	ECTS credits	10			
8.	Optional for	NA			
9.	Excluded combinations	NA			
10.	Pre-requisite or co-requisite	NA			
11.	Class contact time: total hours	Total Hours:60			
12.	Independent study time: total hours	Total Hours: 140			
13.	Semester(s) of delivery	1			
14.	Main campus location	University Centre Weston			
15.	Module co-ordinator	Gill Cook			
16.	Additional costs involved	NA			
17.	Brief description and aims of module The module is based around biological principles of a range of animals at a gross and cellular level. These principles are to be considered and theoretically applied to animals in both captive and natural environments, including links to health and best management practice. Anatomy and physiology will be explored, predominantly mammalian, to provide knowledge on body systems and their functions.				
18.	Outline syllabus Species range: emphasis on equidae, rodents, birds, lagomorphs and aquatic mammals. Anatomy and Physiology of major systems: cell structure and basic tissue types, locomotion (bones, joints, muscles), senses and responses, nervous response (CNS, ANS, PNS), CV system, excretion, reproductive system (male/female, to include hormonal control), endocrine system (glands, hormones), respiratory tract (upper and lower), different management considerations for a range of species with link to captive and natural environments.				
19.	Scheduled Teaching and learning activities **Scheduled learning** Includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. **Independent learning**				

<table>
<tr><td>20.</td><td>

Intended learning outcomes

By successful completion of the module, you will be able to:

1. Demonstrate knowledge of the structure of the animal body at a cellular level and relate to gross anatomy
2. Demonstrate an understanding of animal physiology and relate it to species and management
3. Demonstrate an understanding of the physiological mechanisms involved in homeostasis and relate this to animal health
4. Demonstrate an understanding of the importance of the use of laboratory reports to communicate information

</td><td>

How assessed

F1, F2, F4, S1, S2

F3, S1, S2

F3, S1

F2, S1

</td></tr>
</table>

21.	Assessment and feedback	
	Formative exercises and tasks: F1. Competency in laboratory skills, to include dissections F2. Laboratory report writing F3. Homeostasis project, in relation to health and management F4. Cell structure and organelle structure and function	
	Summative assessments: S1. Scientific Report 2000 words	Weighting 50%
	S2. In class test unseen (60 minutes).	50%

22.	Learning resources *University Library print, electronic resources and Minerva:* *Key texts* • Akers, R.M. (current edition) *Anatomy and physiology of domestic animals*. Oxford: Blackwell. • Aspinall, V. (current edition) *Introduction to veterinary anatomy and physiology textbook*. Edinburgh: Butterworth Heinemann. • Boyd, J.S. (current edition) *Colour atlas of clinical anatomy of the dog and cat*. London: Mosby-Wolfe. • Davies Morel, M. (current edition) *Equine reproductive physiology, breeding and stud management*. Oxfordshire: CABI.

Above the table:

Includes the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.

Virtual learning environment (VLE) (or equivalent)

This module is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.

	- Evans, H.E. and Christensen, G.C. (current edition) *Miller's anatomy of the dog*. Philadelphia: W. B. Saunders Company. - Frandson, R.D. and Spurgeon, T.L. (current edition*) Anatomy and physiology of farm animals*. Philadelphia: Lea & Febiger. - Horowitz, A. and Berg, R. (2012) (current edition) *Anatomy of the horse.* Hanover: Schlutersche Verlagsgesellschaft mbH & Co. KG. - Jenkins, G. (current edition) *Anatomy and physiology: from science to life*. Hoboken, N.J. John Wiley. - Marlin, D. and Nankervis, K. (current edition) *Equine exercise physiology.* Oxford: Blackwell Publishing. - Parker, R. (current edition) *Equine science.* Andover: Cengage. - Ruckebusch, Y., Phaneuf, L-P. and Dunlop, R. (current edition) *Physiology of small and large animals.* Philadelphia: BC Decker Inc. - Thibodeau, G. (current edition) *Anatomy and physiology*. St. Louis, Mo: Mosby Elsevier. *Key web-based and electronic resources* - Science Direct - DEFRA - LANTRA - British Horse Society
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their laboratory skills are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON4002-20
2.	Module title	Introduction to Ecology and Conservation
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	4
6.	UK credits	20
7.	ECTS credits	10
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	60 hours
12.	Independent study time: total hours	140
13.	Semester(s) of delivery	1
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA
17.	Brief description and aims of module This module is aimed at introducing the concept and practices of ecology and conservation and how designs and practices can be applied to benefit populations. The application of ecological techniques in conservation practices will be explored and appraised regarding suitability for different conservation scenarios. The need and benefits of conservation will be examined using success stories to support delivery.		
18.	Outline syllabus Ecological principles underpin the study of organisms in their habitats and their distributions. Such findings are used to inform conservation practices and programmes. An understanding of ecological principles and techniques along with their suitability for different scenarios is paramount when determining an organism's need for conservation intervention. Within this module you will have the opportunity to develop your research and IT skills through undertaking online research with both academic databases such as JStor and ebsco. The skills developed here will form part of your lifelong learning skill set and will be further developed at different stages of the programme.		
19.	Teaching and learning activities **Scheduled learning** Includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. **Independent learning** Includes the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an		

	average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make. **Virtual learning environment (VLE)** This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.	
20.	Intended learning outcomes *By successful completion of the module, you will be able to :* 1. Demonstrate knowledge and understanding of the ecological processes that define and affect disturbed and undisturbed ecosystems 2. Demonstrate knowledge of principles of population ecology and community ecology theory to inform ecological management decisions in a range of contexts 3. Demonstrate an understanding of key processes that underpin population biology. 4. Demonstrate knowledge of how ecological theory can inform conservation practice, and understand the threats to biodiversity from habitat loss, invasive species and climate change	*How assessed* *F2, S1* *F1, S1* *F1, S1* *F2, S1*
21.	Assessment and feedback *Formative exercises and tasks:* F1. Appraisal of the design of conservation programmes F2. Success of conservation programmes	
	Summative assessments: S1. Presentation with supporting evidence (poster) (20 mins)	Weighting 100%
22.	Learning resources *University Library print, electronic resources and Minerva:* *Key texts* Begon, M., Harper, J.L. & Townsend, C.R. Ecology: individuals, populations and communities. Blackwell Scientific Publications, Cambridge.	

	Ausden, M. *Habitat management for conservation: a handbook of techniques*. Oxford University Press, Oxford. Falk, D.A. *Foundations of Restoration Ecology. Island Press*, Washington DC. Krebs, C.J. *Ecology: the experimental analysis of distribution and abundance*. Benjamin Cummings, San Francisco. Newman, E.I. *Applied Ecology and Environmental Management*, Blackwell Scientific. Sutherland, W.J. & Hill, D.A. *Managing habitats for conservation*. Cambridge University Press. Townsend, C.R., Harper, J.L. & Begon, M. *Essentials of ecology*. Blackwell Science Wheater, C.P., Bell, J.R. & Cook, P.A. *Practical Field Ecology*. Jon Wiley & Sons, *e-book available on line*.
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON4003-20
2.	Module title	Applied Animal Behaviour
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	4			
6.	UK credits	20
7.	ECTS credits	10
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	60 hours
12.	Independent study time: total hours	140
13.	Semester(s) of delivery	1
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA
17.	Brief description and aims of module The aim of this module is to develop knowledge on the foundations of animal behaviour through the exploration of evolution, sensory adaptations and innate and learned behaviour. How behaviour can be impacted by captivity will be understood and the ability to observe behaviour using ethograms will also be enabled. A range of animals will be observed via practical activities with consideration of evolution, proximate analysis, sensory adaptations and capabilities and environmental factors. Learning theories will also be discussed and applied to a range of theoretical and practical scenarios and the potential impact on management and welfare.	
18.	Outline syllabus Adaptive explanations for animal behaviour (function), internal and external environmental influences (causes), how and why behaviour evolves in species (evolution), development of behaviour, innate and learned behaviour (imprinting, habituation, classical conditioning, operant conditioning), social behaviour, communication and sensory.	
19.	Teaching and learning activities **Scheduled learning** Includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. **Independent learning** Includes the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an	

average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.

Virtual learning environment (VLE)
This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.

20.	Intended learning outcomes *By successful completion of the module, you will be able to:*	*How assessed*
	1. Demonstrate knowledge of the evolutionary and proximate explanations for behaviour	*S1*
	2. Understand the underlying physiological processes and development of animal behaviour	*S1, F2*
	3. Demonstrate knowledge of the evolution of animal signals, why they evolve, and how they are used to communicate	*S2, F2*
	4. Demonstrate knowledge of how to interpret ethograms and relate to natural behaviour	*F1, F2, S2*
21.	Assessment and feedback *Formative exercises and tasks:* F1. Behavioural observations on a range of species F2. Identification of animal signals in a range of species	
	Summative assessments: S1. 10-minute oral presentation S2. Scientific Report (2000 words).	Weighting 40% 60%
22.	Learning resources *University Library print, electronic resources and Minerva:* *Key texts* Alcock, J. (current edition) *Animal behaviour: an evolutionary approach*. Massachusetts: Sinauer Associates, Inc. Barnard, C. (current edition) *Animal behaviour: mechanisms, development, function, evolution.* London: Pearson. Goodenough, J., McGuire, B. & Wallace, R.A. (current edition) *Perspectives on animal behaviour.* New York: Wiley and Sons, Inc. Jensen, P. ed. (current edition) *The ethology of domestic animals; an introductory text.* Oxon: CAB International Publishing. Manning, A. and Stamp Dawkins, M. (current edition) *An introduction to animal behaviour.* Cambridge: Cambridge University Press. McFarland, D. (current edition) *Animal behaviour: pyschobiology, ethology and evolution.* Harlow: Longman Scientific and Technical. Milklosi, A. (current edition) *Dog behaviour, evolution and cognition,* Oxford, Oxford University Press. Slater, P.J.B. (current edition) *Essentials of animal behaviour.* Cambridge: Cambridge University Press.	

	Scott, G. (current edition) *Essential animal behaviour*. Oxford: Blackwell. Serpell, J (current edition) *The domestic dog; its evolution, behaviour and interactions with people.* Cambridge, Cambridge University Press *Key web-based and electronic resources* • Science Direct • DEFRA • LANTRA • British Horse Society • Animal Health Trust • Animal Behaviour [electronic journal] • Applied Animal Behaviour Science [electronic journal] • Animal Welfare [electronic journal]	
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.	
1.	Module code	CON5004-20
2.	Module title	Biodiversity and Sampling Techniques
3.	Owning Programme ,	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	5
6.	UK credits	20
7.	ECTS credits	10
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	60 hours
12.	Independent study time: total hours	140
13.	Semester(s) of delivery	2
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA
17.	Brief description and aims of module This module aims to equip students with the necessary skills and knowledge to undertake ecological sampling in the field. Such skills can then be applied to a range of habitats and ecosystems. Critical	

	evaluation of ecological data is important as it often underpins policy making decisions. Students will gain the knowledge and analytical skills to critically evaluate both primary and secondary ecological data.
18.	Outline syllabus This module builds on the concepts introduced in Yr 1 – Introduction to Ecology and Conservation. Underpinning ecological principles are contextually identified and the importance of these when selecting sampling techniques for ecological surveying. Potential problems relating to accurate and representative sampling are considered and the relevance of biodiversity to nature conservation is identified.
19.	Teaching and learning activities ***Scheduled learning*** May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. ***Independent learning*** May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. ***Virtual learning environment (VLE)*** This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.

20.	Intended learning outcomes *By successful completion of the module, you will be able to:*	*How assessed*
	1 Apply ecological principles to the study of population dynamics	*S1, S2, F1*
	2 Critically evaluate the appropriateness of different approaches to solving problems in the field of study ecosystem being studied	*S1, S2, F1*
	3 Use established techniques to undertake critical analysis of information from within the field of ecology	*S1, S2, F2*

21.	Assessment and feedback *Formative exercises and tasks:* F1. Ecological sampling techniques and applications identified. F2. Methods of ecological data presentation	
	Summative assessments: S1. Fieldwork notebook of data collection and observations. S2. Report. (2500 words)	Weighting 50% 50%

22.	Learning resources
	University Library print, electronic resources and Minerva: Hill, D., Fasham, M., Tucker, G., Shewry, M., & Shaw, P. (Eds.). (2005). *Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring.* Cambridge: Cambridge University Press. doi:10.1017/CBO9780511542084 <u>Journals</u> Nature <u>Websites</u> Oikos Field Studies Council National Biodiversity Network
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON5001-20			
2.	Module title	Conservation Genetics			
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare			
4.	Core, Required or Required* for	Core			
5.	Level	5			
6.	UK credits	20			
7.	ECTS credits	10			
8.	Optional for	NA			
9.	Excluded combinations	NA			
10.	Pre-requisite or co-requisite	NA			
11.	Class contact time: total hours	60 hours			
12.	Independent study time: total hours	140			
13.	Semester(s) of delivery	1			
14.	Main campus location	University Centre Weston			
15.	Module co-ordinator	Gill Cook			
16.	Additional costs involved	NA			

17.	Brief description and aims of module
	An understanding of population genetics is critical when considering the techniques for population management. The evolutionary events determining gene pools can play a critical role in the need for carefully managed breeding and conservation programmes. Reproductive technologies used within breeding and conservation are becoming more common place and their efficacy is important, not just in terms of conservation success but also when considering animal ethics and welfare.
18.	Outline syllabus
	The genetic processes leading to evolution will be investigated, these will be analysed in relation to conservation programmes and the implications for these. The principles of ecology will be built upon to show their importance when constructing conservation programmes. Analytical skills will be developed by the critical evaluation of current and past conservation programmes.
19.	Teaching and learning activities
	Scheduled learning
	May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop.
	Independent learning
	May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc.
	Virtual learning environment (VLE)
	This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.

20.	Intended learning outcomes *By successful completion of the module, you will be able to:* 1 Critically understand the importance of genetic processes and evolutionary mechanisms, along with their measurement within the context of conservation	*How assessed* *S1, F1*
	2. Demonstrate knowledge and critical understanding of the role of ecology in genetic problems associated with small population biology alongside evolutionary processes.	*S1, F1, F2* *S1, F1, F2*
	3 Demonstrate a critical understanding of, and ability to communicate information and arguments on how population genetics influence conservation programmes 4. Interpret genetic data and relate to behavioural data in the context of conservation biology.	*S1, F2*
21.	Assessment and feedback *Formative exercises and tasks:* F1. Presentation to group on genetic processes and evolutionary mechanisms. F2. Analysis of case studies in small groups with suggestions for improvement.	
	Summative assessments: S1.Unseen test (genetic principles) S2 Report on case study (2500 words).	Weighting 50% 50%
22.	Learning resources *University Library print, electronic resources and Minerva:* Allendorf, F. W., Luikart, G. H., Aitken, S. N. (2012). Conservation and the Genetics of Populations (PDF eBook) 2nd Edition. Wiley. ISBN 9781118408568. Fred W Allendorf, F. W., Funk, C. W., Aitken, S. N., Byrne, M., Luikart, G. H., Taylor, H. R. (2022). Conservation and the Genomics of Populations**.** Oxford University Press. ISBN 9780198856573 Brown, T. (2020). Gene Cloning and DNA Analysis - An Introduction. John Wiley and Sons Ltd. ISBN 9781119640783 Frankham, R., Ballou, J. D., Briscoe, D. A. (2010). Introduction to Conservation Genetics 2nd Revised edition. Cambridge University Press. ISBN 9780521702713. Higgs, P. G. (2004). Bioinformatics and Molecular Evolution. John Wiley and Sons Ltd. ISBN 9781405106832 Journals Conservation Genetics – Springer Nature	

	<u>Databases</u> BioOne Science Direct Web of Knowledge <u>Websites</u> Learn.Genetics (utah.edu)
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON5000-20			
2.	Module title	Research Methods			
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare			
4.	Core, Required or Required* for	Core			
5.	Level	5			
6.	UK credits	20			
7.	ECTS credits	10			
8.	Optional for	NA			
9.	Excluded combinations	NA			
10.	Pre-requisite or co-requisite	NA			
11.	Class contact time: total hours	60 hours			
12.	Independent study time: total hours	140			
13.	Semester(s) of delivery	1			
14.	Main campus location	University Centre Weston			
15.	Module co-ordinator	Gill Cook			
16.	Additional costs involved	NA			
17.	Brief description and aims of module This module aims to develop knowledge and understanding of research methods and approaches by appraising and critiquing conservation, behaviour or welfare-based research. Rationale for research, as well as research design, methodologies and ethical considerations will be explored in addition to examining how past/current research can inform future practice and research.					
18.	Outline syllabus Accessing and appraising conservation, behaviour or welfare-based research literature, understanding research design, understanding qualitative and quantitative methodologies, evaluation research and its potential for informing practice, understanding the importance for developing research questions and devising methods for their investigation Within this module you will have the opportunity to develop your research and IT skills through undertaking online research with both academic databases such as JStor and ebsco. The skills developed here will form part of your lifelong learning skill set and will be further developed at different stages of the programme.					
19.	Teaching and learning activities **Scheduled learning** Includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. **Independent learning** Includes the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an					

	average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make. **Virtual learning environment (VLE)** This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.

		How assessed

20.	Intended learning outcomes
	By successful completion of the module, you will be able to:
	    1. Demonstrate a contextual understanding of research methodology and its application within the field of animal research.
	    2. Critically analyse animal research literature using a recognised framework
	    3. Critically evaluate research designs/methods and discuss the rationale for their use in animal research
	    4. Evaluate critically the ethical issues in animal research.
		F1, S1, S2
		F1, S2
		
		S1, S2
		
		F1, S1, S2

21.	Assessment and feedback *Formative exercises and tasks:* F1. Carry out mini research project considering rationale, methodology, methods, data collection, results, ethical considerations and draw relevant conclusions	
	Summative assessments: S1. In class test (unseen) – 1 hour S2. Report – 3000 words	Weighting (40%) (60%)

22.	Learning resources *University Library print, electronic resources and Minerva:* *Key texts* Bell, J. (current edition). *Doing your research project.* Maidenhead: McGrawHill / Open University Press. Cohen, L., Manion, L. and Morrison, K. (current edition). *Research methods in education.* London: Routledge Falmer. Germov, J. (current edition). *Get great marks for your essays.* Crows Nest, Australia: Allen and Unwin. Hucker, K. (current edition). *Research methods in health, care and early years.* Oxford: Heinemann. Levin, P. (current edition). *Write great essays! Reading and essay writing for undergraduates and taught postgraduates.* Maidenhead: Open University Press. McNiff, J. (current edition). *Action research: principles and practice. London*: Routledge Falmer.

	Soles, D. (current edition). *The academic essay: how to plan, draft, revise, and write essays.* Bishops Lydeard: Studymates. Stott, R. *et al.* (current edition). *Making your case: a practical guide to essay writing.* Harlow: Longman/Pearson Education. Thomas, G. (current edition*). A guide for students in education and applied social sciences. How to do your research project.* London: Sage. *Key web-based and electronic resources* • Science Direct • Animal Behaviour [electronic journal] • Applied Animal Behaviour Science [electronic journal] • Animal Welfare [electronic journal]
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON5002-40
2.	Module title	Professional Practice in the Animal Industry
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	5			
6.	UK credits	40
7.	ECTS credits	20
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	120 hours
12.	Independent study time: total hours	280 plus the number of work placement hours to equate to 140 hours over levels 4 and 5 (minimum of 50 which have been achieved at L4)
13.	Semester(s) of delivery	1 and 2
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA

17. Brief description and aims of module

The module is based around progression and expansion of Working in the Animal Industry delivered at level 4. You will select 2 National Occupational Standards (NOS) that are relevant to your work placement and/or practical provision and present an electronic portfolio based upon knowledge and performance criteria stipulated in the selected NOS's. Workplace hours for the programme are to equate to 140 hours, a minimum of 50 hours is required when studying at level 4 so you will be required to fulfil the relevant amount at level 5 to achieve 140 hours in total over the 2 years. Reflection of performance and development will be achieved using reflective models with application from theory to practical evident whilst evaluating the selected NOS's. You will also reflect upon working with professionals and the public as well as producing a transferable skills action plan.

18. Outline syllabus

To work with a range of species at different life stages whilst considering animal management strategies and techniques. Assessment of the value of working with other professionals and the role of allied businesses/organisations regarding health, nutrition, housing, legislation and any other elements of animal management that relates to selected NOS's. Use of reflective models and their application in the workplace and their link to action plan development and transferable skills.

19.	Teaching and learning activities **Scheduled learning** May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. **Independent learning** May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make. **Placement learning** Work-based learning equating to the total of 140 hours (minimum of 50 which have been carried out in year 1) of approved and verified work experience (the maximum claimable work is 48 hours per week) is a compulsory part of this module. Overseas work experience is feasible, but this must be discussed and approved well in advance. The work placement tutor will: Mentor the student through the whole process from selecting placement options, application and interview, through to the end of the placement exit interview with the placement provider. Help the student construct a personal development plan / work objectives in conjunction with the placement provider. Monitor progress throughout the placement with the student and placement provider.	
20.	Intended learning outcomes *By successful completion of the module, you will be able to:* 1 Critically analyse animal management strategies utilised in the care of animals. 2 Critically evaluate the principles of animal management utilised within the animal industry. 3 Critical understanding of the importance of clear communication of information with both members of the public and animal industry professionals, and demonstrate an ability to do this effectively 4 Critically reflect upon experience and/or practise with reference to transferable skills gained during placement. 5 Demonstrate a critical understanding of the importance of Continuing Professional Development within the animal industry.	*How assessed* *S1 S2 F1* *S1 S2 F1 F2* *S1 S2 F1* *S2 F2* S2 F2
21.	Assessment and feedback *Formative exercises and tasks:* F1. Interim assessments of selected NOS's	

	F2. Reflective writing task using models of reflection	
	Summative assessments: S1. PDP with reflective Portfolio and practical skills assessment - workplace logbook demonstrating either a minimum of 80 hours work placement or 140 hours over levels 4 and 5 with completed employer and self-assessment form. S2. Presentation based on selected NOS's with supportive evidence (30 mins).	Weighting 50% 50%
22.	Learning resources *University Library print, electronic resources and Minerva:* *Key texts* Agar, S. (current edition) *Small animal nutrition.* Edinburgh: ButterworthHeinemann. Boden, E. (current edition) *Black's veterinary dictionary*. London: A&C Black. Dallas, S., North, D. and Angus, J. (current edition*) Grooming manual for the dog and cat.* Oxford: Blackwell Publishing. Lane, D. Cooper, B. & Turner, L. (current edition) *BSAVA textbook of veterinary nursing.* Gloucester: BSAVA. Manning, A. (current edition) *Introduction to animal behaviour*. Oxford: Marion Stamp Dawkins. Meredith A. and Redrobe, S. (current edition) *BSAVA manual of exotic pets.* Gloucester: BSAVA. Pond, W. Church, D. Pond, K. and Schoknecht, P. (current edition) *Basic animal nutrition and feeding.* Oxford: Wiley and Sons. Poole, T. (current edition) *UFAW handbook on the care and management of laboratory animals: Terrestrial Vertebrates.* Oxford: Blackwell Publishing. Young, R.B. (current edition) *Environmental enrichment for captive animals.* Oxford: Blackwell Publishing. *Key web-based and electronic resources* - Science Direct - DEFRA - LANTRA - British Horse Society - Animal Health Trust - British and Irish Association of Zoos and Aquariums www.biaza.org.uk - Royal College of Veterinary Surgeons www.rcvs.org.uk Journals Animal Behaviour Applied Animal Behaviour Science The British Journal of Animal Behaviour The Veterinary Journal	

	Zoology
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their practical skills are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON5003-20
2.	Module title	Animal Welfare and Ethics
3.	Subject	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	5			
6.	UK credits	20
7.	ECTS credits	10
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	60 hours
12.	Independent study time: total hours	140
13.	Semester(s) of delivery	2
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA

17.	Brief description and aims of module A case study focussed module where the aim is to evaluate the impact of a chosen scenario (based around poaching/trophy hunting/breeding for sports/conservation practices) on ethical stances, welfare costs/benefits, moral and ethical theories and the role of animal rights and animal welfare organisations. Students will gain the ability to form a balanced view of differing ethical stances and form an objective view on uses of animals from a range of societal and cultural ethea. Animal rights and welfare organisations will be appraised, and their roles and effectiveness in ethical dilemmas will be analysed.
18.	Outline syllabus History of animal welfare and ethics, work undertaken by various animal welfare and animal rights organisations, introduction of theories, ethical stances (deontological, contractarianism, utilitarianism, relationism and respect for nature) and concerns of different uses of animals.
19.	Teaching and learning activities ***Scheduled learning*** May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. ***Independent learning*** May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. ***Virtual learning environment (VLE)*** This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.

20.	Intended learning outcomes *By successful completion of the module, you will be able to:* 1 Demonstrate knowledge and critical understanding in the role that Animal Welfare and Animal Rights organisations play in improving animal welfare. 2 Demonstrate a critical understanding of the ways in which moral and ethical theories influence attitudes to animals 3 Evaluate critically, animal welfare debates that concern poaching, trophy hunting, sports animals and conservation practices 4 Effectively communicate information and arguments relating to animal-based ethical debates to specialist and non-specialist audiences	*How assessed* *S1, F1* *S1, F1* *S1, F1* S1 F1
21.	Assessment and feedback *Formative exercises and tasks:* F1. Patchwork assessment based on learning outcomes to prepare for summative assessment, including development of presentation skills	
	Summative assessments: S1. Presentation with supportive evidence (30 minutes)	Weighting 100%
22.	Learning resources *University Library print, electronic resources and Minerva:* Armstrong, S.J. (current edition) *The animal ethics reader.* London: Routledge. Broom, D.M. and Fraser, A.F. (eds.) (current edition) *Domestic animal behaviour and welfare*. Wallingford: CAB International. Broom, D.M. and Johnson, K.G. (current edition) *Stress and animal welfare.* London: Chapman & Hall. Corrigan, R., and Farrell, M.E. (eds.) (current edition) *Ethics: a university guide.* Gloucester: Progressive Frontiers Press. Fraser, A.F. and Broom, D.M. (current edition) *Farm animal behaviour and welfare.* Wallingford: CAB International. Griffin, D.R. (current edition) *Animal minds.* Chicago: The University of Chicago Press. Rowlands, M. (current edition) *Animal rights: moral theory and practice*. Chippenham and Eastbourne: Palgrave Macmillan. <u>Journals</u> Animal Welfare. Journal of Applied Animal Welfare Science. Opinion articles in quality newspapers and magazines. <u>Databases</u> BioOne Science Direct Web of Knowledge

		Websites Universities Federation for Animal Welfare (UFAW) www.ufaw.org.uk Department for the Environment, Food and Rural Affairs http://defra.gov.uk National Centre for the Replacement, Refinement and Reduction of Animals in Research www.nc3rs.org.uk
23.		Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON6001-20			
2.	Module title	Environmental Extremes and Diversity of Life			
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare			
4.	Core, Required or Required* for	Core			
5.	Level	6			
6.	UK credits	20			
7.	ECTS credits	10			
8.	Optional for	NA			
9.	Excluded combinations	NA			
10.	Pre-requisite or co-requisite	NA			
11.	Class contact time: total hours	60 hours			
12.	Independent study time: total hours	140			
13.	Semester(s) of delivery	2			
14.	Main campus location	University Centre Weston			
15.	Module co-ordinator	Gill Cook			
16.	Additional costs involved	NA			
17.	Brief description and aims of module The aim of this module is to familiarise students with the ethical considerations of a range of extreme habitats and how animals adapt behaviourally and physiologically in order to thrive. Environments and adaptations will be linked to evolution and explored regarding benefits and disadvantages in terms of survival and population numbers. Replication of environments in captive situations will also be appraised and analysed and the management considerations in the context of animal welfare and husbandry applicable to a range of species.				
18.	Outline syllabus Physiological adaptations and metabolic functions of species in a range of extreme environments such as dry, hot, cold, wet, pressure, altitude will be explored, and the way in which the environment controls metabolic functions and the link to survival strategies.				
19.	Teaching and learning activities ***Scheduled learning*** May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. ***Independent learning*** May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. ***Virtual learning environment (VLE)***				

	This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.	
20.	Intended learning outcomes *By successful completion of the module, you will be able to:* 1 Demonstrate a conceptual understanding of physiological adaptations in a range of species that inhabit extreme environments and an ability to communicate this to audiences. 2 Demonstrate a conceptual understanding of the environmental controls of metabolic functions and the ability to analyse these 3 Critically evaluate arguments and concepts around survival strategies in extreme habitats and to communicate these to specialist and non-specialist audiences	*How assessed* *F1, S1* *F2, S1* *F2, S1*
21.	Assessment and feedback *Formative exercises and tasks:* F1. Describe a range of extreme habitats and species that inhabit them F2. Analyse survival strategies from a behavioural and physiological perspective	
	Summative assessments: S1. Presentation with supporting evidence on an extremophile investigating anatomical and physiological adaptations (30 mins)	Weighting 100%
22.	Learning resources *University Library print, electronic resources and Minerva:* Berger, J. (current edition) *Extreme Conservation. Life at the edges of the world.* Chicago and London. The University of Chicago Press Ltd. Prisco, G D. Edward, H G M. Elster, J. and Huiskes A H L. (current edition) *Life in Extreme Environments. Insights in Biological Capability.* UK, Cambridge University Press. Seckbach, J. Oren, A. and Stan-Lotter, H. (editors) (current edition) *Polyextremophiles. Life Under Multiple Forms of Stress.* USA. Springer. Seckbach, J. and Stan-Lotte, H. (current edition) *Extremophiles as Astrobiological Models.* USA. Scrivener Publishing	

	[Biological Conservation	Journal	ScienceDirect.com by Elsevier](#) [The Society for Conservation Biology (wiley.com)](#) [Society for Conservation Biology	Home (conbio.org)](#) [Journals	Oxford Academic (oup.com)](#)
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON6004-20
2.	Module title	Behavioural Ecology in Conservation
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	6
6.	UK credits	20
7.	ECTS credits	10
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	60 hours
12.	Independent study time: total hours	140
13.	Semester(s) of delivery	2
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA
17.	Brief description and aims of module The aim of this module is to bring together concepts covered at L4 and 5 to provide a holistic view of the links between behavioural ecology and conservation. This will enable students to appreciate the need for behavioural and ecological considerations for conservation programmes. Ecoevolutionary knowledge and understanding are key considerations for conservation strategies to ensure their success, this module will equip learners with the knowledge to make these considerations when working on conservation initiatives.	
18.	Outline syllabus Principles of behavioural ecology will be investigated using a range of contexts. Methods of assessing animal behaviour both in-situ and ex-situ will be critically evaluated. Findings of such behavioural analyses will be considered in the context of conservation programmes. A variety of case studies will be critically reviewed to assess the role of behavioural ecology in informing the programme and how this could be further improved, with reference to the current literature.	
19.	Teaching and learning activities *Scheduled learning* May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. *Independent learning* May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. *Virtual learning environment (VLE)*	

<table>
<tr><td colspan="3">This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.</td></tr>
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		How assessed
20.	Intended learning outcomes *By successful completion of the module, you will be able to:* 1 Demonstrate a systematic understanding of the adaptation of animals to their environment using behavioural and evolutionary principles	*F2, S1,*
	2 Critically evaluate arguments on the role that environmental and social factors have in influencing behavioural responses	*F1, S1*
	3 Systematically analyse the adaptive function of reproductive, social and foraging strategies	*F1, S1*
	4 Conceptual understanding of the role of behavioural ecology in the design of conservation programmes, enabling the ability to critically evaluate them and identify solutions to problems that arise.	*F1, S1*
21.	Assessment and feedback *Formative exercises and tasks:* F1. Group evaluation of case studies as directed F2. Proposal of research articles for literature review	
	Summative assessments: S1. Literature review of conservation programmes in the context of behavioural ecology (5000 words).	Weighting 100%
22.	Learning resources *University Library print, electronic resources and Minerva:* Caro, T. (1998). Behavioral Ecology and Conservation Biology. Oxford University Press ISBN-10 : 0195104900, ISBN-13 : 978-0195104905 Berger-Tal, Oded & Saltz, David. (2016). Conservation Behavior Applying Behavioral Ecology to Wildlife Conservation and Management. Cambridge University Press ISBN: 978-1-107-69041-7 Behaviour and Conservation, (2000). Edition: First. Publisher: Cambridge University Press. Editor: L. Morris Gosling and William J. Sutherland. ISBN: 0 521 66230 3 and 0 521 66539 6 An Introduction to Behavioural Ecology, 3rd Edition, <u>Nicholas B. Davies</u>, <u>John R. Krebs.</u> ISBN: 978-1-444-31402-1 July 2009 Wiley-Blackwell 432 Pages Rubenstein, Dustin. (2010). Evolutionary Behavioral Ecology . Edited by David Westneat and Charles W. Fox . Oxford and New York : Oxford University Press . ISBN: 978-0-19-533193-6 (hc); 978-0-19-533192-9 (pb) . 2010 .. The Quarterly Review of Biology. 85. 504-504. 10.1086/656864.	

	Blumstein, Daniel & Fernández-Juricic, Esteban. (2010). A Primer of Conservation Behavior.
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON6000-20			
2.	Module title	Data Analysis and Conservation			
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare			
4.	Core, Required or Required* for	Core			
5.	Level	6			
6.	UK credits	20			
7.	ECTS credits	10			
8.	Optional for	NA			
9.	Excluded combinations	NA			
10.	Pre-requisite or co-requisite	NA			
11.	Class contact time: total hours	60 hours			
12.	Independent study time: total hours	140			
13.	Semester(s) of delivery	1			
14.	Main campus location	University Centre Weston			
15.	Module co-ordinator	Gill Cook			
16.	Additional costs involved	NA			

17.	Brief description and aims of module This module is designed to provide you with the opportunity to develop knowledge on data analysis and analysis of research. The aim of this module is to further develop and enhance understanding of data analysis reflecting on the need for robust data analysis to help support and inform the scientific community. The understanding of how data can be manipulated and interpreted has had a significant impact on the understanding of a diversity of scientific issues.
18.	Outline syllabus Using a variety of research articles and relevant case studies students will gain an appreciation of research design and the importance of being able to interpret data to assess its reliability and significance. Underpinning statistical principles will be detailed; sampling methods, probability theory and distributions, statistical test assumptions. The knowledge gained will enable students to select and utilise a variety of statistical tests on both primary and secondary data.
19.	Teaching and learning activities ***Scheduled learning*** May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. ***Independent learning*** May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. ***Virtual learning environment (VLE)***

	This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.	
20.	Intended learning outcomes *By successful completion of the module, you will be able to:* 1. Demonstrate a systematic understanding of the components of data analysis and how they influence research design 2. Demonstrate a conceptual understanding of the assumptions of statistical tests and ability to deploy established techniques of analysis with the field of animal conservation, behaviour and welfare 3. Critically evaluate arguments that inform research or challenge professional practice and use these to make judgements and achieve solutions within the field of animal research.	*How assessed* *F1, S1* *F1, S1* *F1,S1*
21.	Assessment and feedback *Formative exercises and tasks:* *F1.* Selection of appropriate statistical tests with correct justification.	
	Summative assessments: S1. A portfolio of statistical activities and analyses covering a variety of statistical tests in the context of conservation (5000 words)	Weighting 100%
22.	Learning resources *University Library print, electronic resources and Minerva:* Dean, M. (2021) *Writing effective ecological reports: A guide to principles and practice.* Exeter. Pelagic Publishing. Primack, B. (2014) *Essentials of conservation biology.* 6th Edition. UK. Oxford University Press. Sodhi, N., and Ehrlich, P.R. (2010) *Conservation biology for all.* UK. Oxford University Press Biological Conservation | Journal | ScienceDirect.com by Elsevier The Society for Conservation Biology (wiley.com) Society for Conservation Biology | Home (conbio.org) Journals | Oxford Academic (oup.com) NHBS - Wildlife, Ecology & Conservation	
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment.	

	Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources.

1.	Module code	CON6002-20
2.	Module title	Conservation and Wildlife Management
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	6			
6.	UK credits	20
7.	ECTS credits	10
8.	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	60 hours
12.	Independent study time: total hours	140
13.	Semester(s) of delivery	1
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA
17.	Brief description and aims of module The aim of this module is to provide students with the knowledge and ability to carry out ecological surveys via field work and use findings to suggest management techniques that could be applied to promote welfare, conservation and management. The survey will equip the students with the skills required to recognise and justify the principles of conservation management and carry out surveys, analysing findings. This module will support the contextualisation of welfare and conservation principles in a practical setting.	
18.	Outline syllabus Principles of ecology will be investigated within the context of conservation management. Ecological sampling techniques will be identified and their uses in various scenarios explained with subsequent animal handling (and welfare considerations) incorporated as part of the sampling techniques. The findings of ecological investigations will be critically evaluated with both primary and secondary sources used for analysis.	
19.	Teaching and learning activities *Scheduled learning* May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop. *Independent learning* May include the hours engaged with essential reading, case study preparation, assignment preparation and completion etc. *Virtual learning environment (VLE)*	

	This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.	
20.	Intended learning outcomes *By successful completion of the module, you will be able to:*	*How assessed*
	1 Demonstrate conceptual understanding and ability to critically evaluate how ecological theory contributes towards management of conservation programmes	*F1, S2*
	2 Demonstrate a systematic understanding of the processes of carrying out ecological surveys whilst being mindful of welfare and ethical considerations whilst surveying, relating findings to conservation priorities	*F1, F2, S1, S2*
	3 Critically evaluate arguments and data around the efficacy of conservation programmes and use this to make judgement or propose solutions.	*S1, S2*
21.	Assessment and feedback *Formative exercises and tasks:* F1. Investigate ecological sampling methods and their applications. F2. Work safely and skilfully to collect ecological data in the field.	
	Summative assessments: S1. Field notebook (as part of practical project). S2. Report (3000 words)	Weighting 25% 75%
22.	Learning resources *University Library print, electronic resources and Minerva:* Dean, M. (2021) *Writing effective ecological reports: A guide to principles and practice.* Exeter. Pelagic Publishing. Primack, B. (2014) *Essentials of conservation biology*. 6th Edition. UK. Oxford University Press. Sodhi, N., and Ehrlich, P.R. (2010) *Conservation biology for all.* UK. Oxford University Press Biological Conservation	Journal	ScienceDirect.com by Elsevier The Society for Conservation Biology (wiley.com) Society for Conservation Biology	Home (conbio.org) Journals	Oxford Academic (oup.com) NHBS - Wildlife, Ecology & Conservation	
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence.	

| | Formal opportunities for students to develop their knowledge are provided within the induction period and student skills sessions. Additional support is available through online resources. |

1.	Module code	CON6003-40
2.	Module title	Dissertation
3.	Owning Programme	BSc (Hons) Animal Conservation, Behaviour and Welfare
4.	Core, Required or Required* for	Core
5.	Level	6			
6.	UK credits	40
7.	ECTS credits	20
8. 0	Optional for	NA
9.	Excluded combinations	NA
10.	Pre-requisite or co-requisite	NA
11.	Class contact time: total hours	120 hours
12.	Independent study time: total hours	280
13.	Semester(s) of delivery	1 and 2
14.	Main campus location	University Centre Weston
15.	Module co-ordinator	Gill Cook
16.	Additional costs involved	NA
17.	Brief description and aims of module An independent study based around a conservation, behaviour or welfare theme. The nature of the dissertation will vary between students, but themes covered will consist of formulation of research aims and objectives, ethical considerations, a literature review, research methods/methodology/design, data collection and analysis, interpretation of data and writing guidelines.	
18.	Outline syllabus The nature of the dissertation will vary for each student; Research aims and objectives Ethical considerations Literature review writing Research method/methodology/design to include quantitative and qualitative data Data collection Interpretation and analysis of data Writing guidelines	
19.	Teaching and learning activities Students will become familiar with the assessment, learning and teaching methods adopted and will be allocated an individual project supervisor to guide them towards completion of their chosen research study. Scheduled learning includes lectures, e-lectures, seminars, tutorials, project supervision. Independent learning includes hours engaged with essential reading, assignment preparation and completion etc. The nature of the dissertation will be individually negotiated.	

	Virtual learning environment (VLE): this specification is supported by a VLE (Microsoft Teams) where students will be able to locate and access all necessary module information. Within this module you will have the opportunity to develop your research and IT skills through undertaking online research with both academic databases such as JStor and ebsco. The skills developed here will form part of your lifelong learning skill set and will be further developed at different stages of the programme.

		How assessed
20.	Intended learning outcomes *By successful completion of the module, you will be able to:* 1 Apply relevant research techniques to a chosen line of inquiry 2 Demonstrate a conceptual and detailed understanding of animal conservation, behaviour and welfare, acquired through the analysis of scholarly articles and primary resources. 3 Systematically explore and apply research ethics in relation to line of inquiry within the field of animal research. 4. Critically analyse animal research data and communicate your findings to both peers and members of the public 5. Conceptual understanding of animal research that enable you to propose a solution to an issue within animal conservation, behaviour and welfare	*How assessed* F1, F2, S1 F1, F2, S1 F1, F2, S1 F1, F2, S1

21.	Assessment and feedback *Formative exercises and tasks:* F1. In addition to taught sessions on the research process with tasks carried out in sessions, regular 1:1 sessions will take place to monitor and advise on the theme of inquiry and the research process F2. Research proposal	
	Summative assessments: S1. Dissertation (10,000 words)	Weighting 100%
22.	Learning resources *University Library print, electronic resources and Minerva:* Field, A. (current edition) Discovering statistics using IBM SPSS Statistics. London: Sage Publications. Greetham, B. (current edition) How to write your undergraduate dissertation. Page 4 of 9 Hampshire: Palgrove Macmillan. Hawkins, D. (current edition) Biomeasurement: A student's guide to biological statistics. Oxford: Oxford University Press. Holmes, D., Moody, P. and Dine, D. (current edition) Research methods for the biosciences. Oxford: Oxford University Press. Martin, P. and Bateson, P. (current edition)	

	Measuring behaviour: an introductory guide. Cambridge: Cambridge University Press. Silverman, D. (current edition) Doing qualitative research: a practical handbook. London: Sage Publications. Wisker, G. (current edition). The undergraduate research handbook. Hampshire: Palgrove Macmillan. Websites British Educational Research Association (BERA). Ethical guidelines for educational research: https://www.bera.ac.uk/researchers-resources/publications/ethicalguidelines-for-educational-research-2011
23.	Preparatory work Pre-existing knowledge will be evident from achieved qualifications prior to programme enrolment. Core material to prepare for the module content will be indicated to the student via pre-course material, module guides and through their accessing a dedicated VLE programme presence. Formal opportunities for students to develop their research skills are provided within the induction period and student skills sessions. Additional support is available through online resources.