

CORPORATE AND ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data			
Awarding Institution	UWE		
Teaching Institution	Bristol Zoo Gardens		
Delivery Location	Bristol Zoo with some p	practical work occ	curring at UWE
Study abroad / Exchange / Credit recognition	n/a		
Faculty responsible for programme	HAS		
Department responsible for programme	BBAS		
Modular Scheme Title	n/a		
Professional Statutory or Regulatory Body Links	None		
Highest Award Title	MSc Advanced Wildlife	Conservation in	Practice
Default Award Title			
Fall-back Award Title			
Interim Award Titles	PGDip Advanced Wildli PGCert Advanced Wild	ife Conservation	in Practice n in Practice
UWE Progression Route			
Mode(s) of Delivery	Full Time / Part Time /	Blended Learning	g
Codes	UCAS:		S: D447
Relevant QAA Subject Benchmark Statements	n/a	TIES	
First CAP Approval Date	2 June 2015	Valid from	January 2016
Revision CAP Approval Date	August 2016	Revised with effect from	January 2016
Version	1.1		
Review Date	September 2021		

Part 2: Educational Aims of the Programme

Context:

The MSc Advanced Wildlife Conservation in Practice is a one-year full-time, or two-year part-time, postgraduate programme designed to provide students with an advanced understanding of the main areas of conservation biology. There has been a rapid growth in UK post-graduate provision in subjects allied to the conservation of biodiversity which has reflected an increasing demand from undergraduates who increasingly need a post-graduate qualification to boost their employability.

Part 2: Educational Aims of the Programme

However, many of these courses don't provide the level of engagement with conservation practitioners beyond academia that this course will provide by being having the majority of the face-to-face taught elements delivered on site at Bristol Zoo Gardens by world-class conservation professionals. This programme offers students with an existing qualification related to biological or environmental sciences the opportunity to build on the knowledge gained at undergraduate level and acquire an advanced knowledge and practical skills in many aspects of conservation biology. This course offers modules covering all key areas of conservation biology i.e. *in-situ* conservation; *ex-situ* conservation and communication while also promoting the importance of innovation and enterprise in developing and utilising new technologies for the benefit of biodiversity. Key skills such as advanced aspects of experimental design and statistical analysis; effective online collaboration and project management will underpin each of the modules providing a common learning thread throughout the course to complement the final research project which will be based either at the university, Bristol Zoo or with a partner organisation.

Broad aims:

This programme is designed to offer an advanced, flexible professional educational programme in the main areas of conservation biology. The design of the programme enables the student to:

- B1. study advanced aspects of conservation biology from diagnosing problems and applying appropriate mitigation strategies to creating effective communication campaigns and exploring mechanisms from realising opportunities afforded by emerging technologies;
- B2. pursue an in depth knowledge and practical experience of *in situ* and *ex situ* conservation techniques which underpin emerging areas of conservation research and practice;
- B3. develop advanced knowledge, understanding and skills to produce new ideas, concepts and solutions for conserving ecosystems and species within local, national and international contexts;
- B4. develop research skills, specifically advanced data collection and interpretation and production of publishable standard of work;
- B5. develop the ability to collaborate effectively with peers in online fora;
- B6. develop the ability to transfer skills gained, particularly in areas of emerging technologies (including remote sensing techniques, genetic survey techniques and online communication), into the workplace or to further education;
- B7. acquire and apply a wide range of appropriate professional skills;
- B8. pursue advanced level learning for career development in conservation biology;
- B9. develop autonomy in the learning process and to become effective self-directed learners;
- B10. achieve a high level of presentation and defence of own work.

Specific aims:

This programme specifically aims to provide the educational and resource environment which will enable students with a background in biological or environmental sciences at degree level or equivalent to:

- S1. acquire an in depth and advanced knowledge of the current concepts and approaches to all main areas of conservation biology;
- S2. develop the ability to critically assess the methods and concepts at an advanced level in relation to all main areas of conservation biology;
- S3. develop practical skills in all main areas of conservation biology, including the use of emerging technologies, and study in depth an area of choice in conservation biology through the research project;
- S4. develop an in-depth understanding of the structure on the conservation sector and the aims and methods of key organisations within the sector;
- S5. develop practical skills and understanding of the ability to work and collaborate effectively at distance in an online workplace;
- S6. equip students with transferable professional and practical skills appropriate to a career in conservation biology and allied disciplines.

The programme team aim to create a friendly and supportive atmosphere that will enable individual students to use the graduate learning experience at UWE, allied to the state-of-the-art learning facilities

Part 2: Educational Aims of the Programme

currently being created at Bristol Zoo, and the Graduate School in the Faculty of Health and Life Sciences, to provide a postgraduate foundation for lifelong learning, continuing professional development and future careers.

The programme team aim to provide a curriculum that is enhanced by a balance of experience from research, consultancy and professional practice.

Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

A graduate from the MSc in Advanced Wildlife Conservation in Practice will have the advanced practical skills, backed up by in-depth knowledge, to diagnose, communicate and address issues of concern for the conservation of biodiversity within local, national and international arenas. Graduates will be trained to identify opportunities to adapt new technologies for use in conservation biology and have direct experience of contemporary methods on both *in situ* and *ex situ* conservation, including effecting human behaviour change, learned on site at Bristol Zoo Gardens which is internationally renowned for its conservation work.

Part 3: Learning Outcomes of the Programme

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Learning Outcomes:	USSKDD-30-M AECiP	USSKDE-30-M ASCIP	USSKDF-30-M C4C	USSKDG-30-M IEC	USSJPR-60-M SSCP
A) Knowledge and understanding of:		i	à	<u>.</u>	1
The scope and nature of conservation evidence and interventions from a variety of complex, real-world scenarios	V	V			
The current concepts and developments within the field of applied conservation biology including innovative methods for studying biodiversity; use of specialist equipment and computer software routinely used in conservation biology; evaluation and interpretation of complex datasets	V	V		\checkmark	
The role of research in furthering knowledge, understanding and conservation action	\checkmark	V	V	V	
The role of technological and social innovation in furthering knowledge, understanding and conservation action	\checkmark	V	\checkmark	\checkmark	
Methods of acquiring, interpreting and analysing information and data with a critical understanding of the appropriate contexts for their use in the development and implementation of conservation strategies	V	\checkmark			\checkmark
The use of research and practice -based inquiry to create, interpret and apply knowledge in the context of conservation biology	\checkmark	\checkmark		\checkmark	\checkmark
Contemporary methods for communicating conservation messages and effecting behaviour change for the benefit of biodiversity			\checkmark		
The importance of sound economic planning in the development and implementation of conservation projects				V	

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Learning Outcomes:	JSSKDD-30-M AECIP	JSSKDE-30-M ASCIP	JSSKDF-30-M C4C	JSSKDG-30-M IEC	ם ששט או עש מעו טטו
(B) Intellectual Skills		.		. 	i
Critically evaluate and select appropriate strategies for conserving biodiversity in a range of different socio-economic scenarios	V	V	\checkmark		
Critically evaluate the opportunity values of emerging technologies to provide innovative and effective conservation interventions			\checkmark	\checkmark	
Critically assess, present and discuss primary reference source material	\checkmark	\checkmark			
Apply relevant, advanced statistical analyses to data sets					V
Develop strategies for updating, maintaining and enhancing their knowledge of conservation biology	\checkmark	\checkmark			
Analyse data gained through practical research	V	V			γ
Critically evaluate current research and advanced scholarship	\checkmark	\checkmark	\checkmark		V
Learn through reflection on practice and experience		V		\checkmark	٦
Construct reasoned arguments to support their position on the ethical and social impact of conservation strategies	V	\checkmark	\checkmark		
(C) Subject/Professional/Practical Skills			<u> </u>	<u> </u>	<u> </u>
Demonstrate a clear and in-depth understanding of a wide range of conservation techniques	\checkmark	\checkmark	\checkmark	\checkmark	٧
Show familiarity with the operation and uses of advanced equipment and emerging technologies			-	\checkmark	
Critically analyse and present experimental data	\checkmark	V			V
Demonstrate an in-depth understanding of research processes					٧
Demonstrate an in-depth understanding of designing, carrying out and evaluating effective communication campaigns			\checkmark		
Demonstrate an in-depth understanding of business planning and its importance in developing innovative conservation methods and sustaining 'green' business				\checkmark	
Demonstrate skills in oral and written scientific communication, both online and offline, relevant to conservation biology	V	\checkmark			٧
Plan, execute and present independent pieces of work, in which skills such as time management, problem solving and independence are evident			\checkmark	\checkmark	V

Learning Outcomes:	USSKDD-30-M AECIP	USSKDE-30-M ASCIP	USSKDF-30-M C4C	USSKDG-30-M IEC	
(D) Transferable skills and other attributes	1	1			1
and carried out both in person and online	v	N	N	N	
Research skills: develop skills to critically evaluate and utilise a variety of learning resources	V	\checkmark	\checkmark		\checkmark
Research skills: undertake independent research to a high standard	V	\checkmark			
Self-reflection: undertake self-reflection and to reflect on others, providing constructive feedback	V		\checkmark	\checkmark	V
Communication: engage confidently in academic and personal communication	V			\checkmark	V
<i>Communication</i> : disseminate and communicate findings both written and orally, making full use of old- and new-media platforms	V	\checkmark			V
Communication: write clearly, succinctly and appropriately					
Data analysis: understand and analyse appropriately different types of scientific and business data	V	\checkmark	\checkmark	\checkmark	
Self-management: self-direct and demonstrate originality in tackling and solving problems	V	\checkmark			V
Self-management: develop effective time- and project-management strategies, demonstrating an ability to complete complex tasks to deadline	\checkmark		$\overline{\mathbf{A}}$	$\overline{\mathbf{v}}$	V
<i>IT skills</i> : knowledge of industry-standard software and techniques including Microsoft Access and ArcGIS	\checkmark		\checkmark	\checkmark	V
Business planning: understand and undertake processes of planning effective strategies by implementing business planning techniques			\checkmark		
Online/distance learning: ability to work effectively at distance from an employer / client	V				
<i>Risk assessment</i> : the ability and knowledge to successfully risk assess field and laboratory activities	\checkmark			\checkmark	V

Part 4: Student Learning and Student Support

Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

This contact time encompasses a range of face to face activities as described below. In addition a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

On the MSc Advanced Wildlife Conservation in Practice programme teaching is a mix of scheduled, independent and distance learning.

Scheduled learning includes lectures, tutorials, project supervision, practical classes and workshops; fieldwork and external visits. Each of the four taught modules will receive up to 60 hours of face-to-face teaching with the remainder (totalling 72 hours per module) being provided via distance learning. The scheduled learning will be delivered in a series of 4-day teaching blocks spread throughout the year. This will allow students already in employment and international students greater opportunity to engage with the course.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc.

Distance learning includes delivery of interactive online lectures, tutor-led seminars and tutorials and self-managed fieldwork.

Induction

The course will commence with an intense six-day induction, which will be designed to foster team-spirit and an innovative outlook amongst the students.

Links to external organisations

Beyond the links with Bristol Zoo, a speaker from an external organisation will be invited to attend each teaching block. This will allow students to develop knowledge of, and personal links with, a variety of local, national and international conservation organisations. Allied to this some of the taught-module assessments will require the students to engage with conservation professionals. Furthermore, students will be advised to seek, and assisted in seeking, research projects based with external partner organisations.

Description of the teaching resources provided for students

Laboratory resources

While the majority of teaching will take place on site at Bristol Zoo Gardens, some advanced techniques (e.g. genetic analyses) will take place at Frenchay campus. The campus has a well-equipped range of general laboratories, specialised scientific equipment and specialist facilities appropriate for teaching and research in all aspects of conservation biology.

Development of a range of key skills required of a scientist in embedded throughout the taught modules, including systematic literature searches, critical review, research methodology and design, statistical and data handling, problem-solving, and IT.

The Zoo has recently extended the Conservation Education Centre to house the Institute of Conservation Science and Learning. In addition to staff offices, this comprises: two large lecture rooms (one seating up to 110, the other up to 75, both divisible into two fully equipped teaching spaces); a further classroom seating up to 40; a computer suite; student common room; meeting/seminar room, again divisible into two; library; and lab for 32 students with adjoining prep room. This has excellent IT and AV facilities throughout.

Students with specialist needs

Part 4: Student Learning and Student Support

Student Services at UWE, Bristol support and guide students on a range of non-curricular issues including welfare, disability and psychological support and counselling. Students with disabilities or learning differences are needs assessed, and any specific learning support measures can be implemented e.g. in the classroom or examinations, and through support of the programme team.

Library and technology enhanced learning

Technology-enhanced learning is a central pillar of this course. Students will be supplied with a personal tablet at the start of the course through which all electronic teaching content can be delivered, especially between teaching blocks. Furthermore, students have 24-hour access to computers, and IT support services are available from the University's Computing Helpdesk.

Description of any Distinctive Features

- Links to active conservation programmes via partner organisations, both in-country and internationally;
- Offer of research placements within UK and international zoos and conservation projects;
- Flexible course delivery with a combination of mini block and distance learning on all modules;
- Access to nature reserves (in particular at Wild Place, Bristol);
- Teaching of GIS and other software packages;
- Development of advanced skills and understanding of eco-entrepreneurship;
- Strong emphasis on communication skills (including links to MA Wildlife Film-making; MSc Science Communication) taught by international experts;
- Practical experience of designing/using emerging technologies e.g. creation of mobile apps; use of environmental DNA for species survey.

Part 5: Assessment

A: Approved to University Regulations and Procedures

Assessment Strategy

Assessment strategy to enable the learning outcomes to be achieved and demonstrated:

Each taught module will be assessed via two assessments designed to mimic tasks that student may be asked to complete in a real-world situation. They will combine elements of group working with individual and controlled conditions work and will provide a platform for the continual acquisition of core skills such as data analysis, online collaboration and communication.

In addition, some assessments, including the research project, are designed to be carried out in collaboration with professional conservation organisations and therefore will encompass a significant element of professional feedback from practising conservationists and potential employers.

Part 5: Assessment

The programme encompasses a range of **assessment methods** including funding bids, project reports, presentations, posters, development of online content, written examinations. These are detailed in the following assessment map:

Assessment Map for MSc Advanced Wildlife Conservation in Practice

			Type of Assessment*								
		Unseen Written Exam	Open Book Written Exam	In-class Written Test	Practical Exam	Practical Skills Assessment	Oral assessment and/or presentation	Written Assignment	Report / Project	Dissertation	Portfolio
Compulsory Modules Level M	USSKDD-30-M AECiP					A (50)		B1 (10)	B2 (40)		
	USSKDE-30-M ASCiP						A (40)		B (60)		
	USSKDF-30-M C4C						B1 (20)	B2 (30)			A (50)
	USSKDG-30-M IEC					B1 (20)		B2 (20)	A (60)		
	USSJPR-60-M SSCP						A2 (20)	A1 (20)		A3 (60)	

*Assessment should be shown in terms of either Written Exams, Practical exams, or Coursework as indicated by the colour coding above.

Part 6: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a typical **full time student**, including: level and credit requirements; interim award requirements; module diet, including compulsory and optional modules

ENTRY	Compulsory Modules	Optional Modules	Interim Awards
	USSKDD-30-M Advanced Ecosystem Conservation in Practice		PG Dip Advanced Wildlife Conservation in Practice
	USSKDE-30-M Advanced Species Conservation in Practice USSKDF-30-M		120 credits PG Cert Advanced Wildlife Conservation in Practice
	Communication for Conservation		60 credits
	USSKDG-30-M Innovation and Enterprise for Conservation		
v	USSJPR-60-M Science and Science Communication Project		

GRADUATION

Part time:

The following structure diagram demonstrates the student journey from Entry through to Graduation for a typical **part time student.**

Part time route through the programme

ENTRY		Compulsory Modules	Optional Modules	Interim Awards
		USSKDD-30-M		
		Advanced Ecosystem		PG Cert Advanced Wildlife
		Conservation in Practice		Conservation in Practice
1	AR			
	щ	USSKDF-30-M		60 credits
		Communication for		
		Conservation		
		Conscivation		
		Advanced Species		PG Din Advanced Wildlife
		Conservation in Practice		Conconvotion in Practico
		Conservation in Flactice		Conservation in Flactice
	2	LISSKDC 20 M		120 gradita
	R			120 Credits
	∠	Innovation and Enterprise		
Ļ	١٢	for Conservation		
•				
		Science and Science		
		Communication Project		

GRADUATION

Part 7: Entry Requirements

The University's Standard Entry Requirements apply with the following additions/exceptions*:

Students with a minimum of a lower second class honours degree in a relevant subject, including overseas students, will also be eligible to apply for the course. Students must meet the minimum English Language requirements of the University for postgraduate study.

Two weeks of introductory study will be required for overseas students whose previous instruction has not been primarily in English, and offered to those not familiar with the pedagogic style employed in the UK.

Applicants will be interviewed (either in person or by video conference or telephone) to confirm the nature of any study required prior to enrolling on the MSc programme.

Part 8: Reference Points and Benchmarks

Description of *how* the following reference points and benchmarks have been used in the design of the programme:

QAA UK Quality Code for HE National qualification framework Subject benchmark statements University strategies and policies Staff research projects

Part 8: Reference Points and Benchmarks

Any relevant PSRB requirements

Any occupational standards

Reference should be made to the graduate outcomes identified in the QAA-HEA Guidance

This specification sets out how external and internal reference points have been drawn upon in programme design.

QAA reference points

The programme has been developed in accordance with QAA statements on postgraduate qualifications, and in relation to QAA Masters level descriptors (March 2010) and the structure of the proposed degree is fully consistent with the QAA position statement on postgraduate qualifications.

External reference points are government and industry development policy and research Priorities.

Specifically:-

- Increased demand for conservation biology qualifications/research by industry and graduates of conservation biology and environmental science undergraduate courses.
- Faculty external activities and links to conservation providers such as use of GIS, effective communication and effective use of emerging technologies.

Internal reference points are the programme teams' expertise, experience and professional links.

Specifically:-

- HAS development of postgraduate provision, supported by the Faculty Graduate School and postgraduate study facilities.
- HAS academic strengths in the current issues areas which are in demand for advanced knowledge and skill development in all aspects of Conservation Biology.
- HAS applied interdisciplinary research, consultancy and professional practice. This includes work
 with national and regional government agencies, the professions, business and industry. For
 example: GIS and science communication with Wildlife Trusts.

University teaching and learning policies

In line with the university's teaching and learning policies, this programme takes a student-centred approach to learning by allowing students to take control of aspects of their learning and providing a learning environment that stimulates active engagement and participation. The programme seeks to create an environment that will stimulate students to take responsibility for aspects of their learning, while the module team facilitate this learning. Module learning outcomes have been designed to ensure that students meet the overall programme learning outcomes on completion of the programme.

A variety of assessment methods are incorporated within the programme to cater for a diversity of approaches to learning. The programme teams recognise the importance of both summative and formative assessments and feedback as an integral part of the learning teaching process. All assessments comply with university assessment regulations, in line with this the MSc will be awarded to students who can demonstrate:

- systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study, or area of professional practice;
- comprehensive understanding of techniques applicable to their own research or advanced scholarship;
- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline;

Part 8: Reference Points and Benchmarks

• conceptual understanding that enables the student:

- o to evaluate critically current research and advanced scholarship in the discipline; and
- to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

Holders of the qualification will be able to demonstrate skills that:

- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and nonspecialist audiences;
- demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level;
- continue to advance their knowledge and understanding, and to develop new skills to a high level and will have the qualities and transferable skills necessary for employment requiring:
 - $\circ\;\;$ the exercise of initiative and personal responsibility;
 - $\circ~$ decision-making in complex and unpredictable situations;
 - o the independent learning ability required for continuing professional development.

Benchmarking

There are currently no official QAA benchmark statements, nor statements from accrediting bodies, for postgraduate studies of biological or environmental sciences. Learning outcomes and assessments have been designed to meet the M level descriptors provided by QAA and SEEC.

What methods have been used in the development of this programme to evaluate and improve the quality and standards of learning? This could include consideration of stakeholder feedback from, for example current students, graduates and employers.

We have built extensively on the consultation with students and conservation practitioners carried out during the recent development of the BSc Wildlife Ecology and Conservation Science. This programme is recruiting very strongly due in large part to the links with Bristol Zoo and the programme's focus on developing practical skills and experience.

Alongside the considerable conservation expertise that resides within the conservation and education teams at Bristol Zoo, consultations have been carried out with existing undergraduates, recent graduates and conservation professionals.

In general the feedback has been extremely positive. Specific comments have led to the inclusion of the use of MS Access as a learning outcome.

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in module specifications, available on the <u>University's website</u>.