STUDENT AND ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data	
Awarding Institution	University of the West of England, Bristol
Teaching Institution	University of the West of England, Bristol Bristol Zoo Gardens, Bristol
Delivery Location	University of the West of England, Bristol Bristol Zoo Gardens, Bristol
Faculty responsible for programme	Faculty of Health & Life Sciences.
Department responsible for programme	Department of Applied Sciences
Modular Scheme Title	
Professional Statutory or Regulatory Body Links	None
Highest Award Title	MSci Wildlife Ecology and Conservation Science
Default Award Title	
Fall-back Award Title	
Interim Award Titles	BSc (Hons) Wildlife Ecology and Conservation Science BSc Wildlife Ecology and Conservation Science Diploma of Higher Education Wildlife Ecology and Conservation Science Certificate of Higher Education Wildlife Ecology and Conservation Science
UWE Progression Route	
Mode(s) of Delivery	FT / SW / PT
Codes	**UCAS:** **JACS:** **ISIS2:** **HESA:**
Relevant QAA Subject Benchmark Statements	Biosciences (2007) Earth Sciences, Environmental Sciences and Environmental Studies (2014)

Conservation Science is a new, multi-disciplinary science that has evolved in response to the national and global issues confronting biological diversity and the impact on wildlife. The MSci (Hons) Wildlife Ecology and Conservation Science programme is a four year full-time or five-year sandwich degree designed to provide graduates with an in-depth understanding of the scientific study of wildlife, the diversity of living organisms and their habitats, and the practical steps that can be taken for effective conservation. It provides an opportunity for students to explore the theory and practice related to wildlife conservation, and to develop both subject-specific and important generic graduate skills, such as practical and analytical skills, work experience, project management, use of technology and communication media. The programme aims to develop in students an in-depth and advanced understanding of the relationship between wildlife and society, the impacts of human activities on the living world, and an appreciation of the practical steps that can be taken to ameliorate biodiversity decline. It takes a multi-disciplinary approach, considering not only the science underpinning the diversity and ecology of wildlife, their habitats and contemporary scientific approaches to conservation, but also legislative, socio-economic factors and the role of communication. This approach allows students to make an informed evaluation of possible solutions to biodiversity loss and propose conservation action plans. The final masters-level year provides students with the opportunity to develop advanced research skills by undertaking an original research project, and to critically engage with knowledge and understanding that is at the forefront of their academic discipline.

The design of the programme enables the student to:

- explore to an advanced level the complexity and diversity of the living world, its evolution and function at an organismal, population, community and ecosystem scale, and its relationship with the physical environment;
- examine how plants and animals interact with each other and their environment;
- develop a systematic understanding of the impact of human activities on the living world and the resulting threat to global biodiversity;
- critically evaluate a range of possible solutions to biodiversity loss, not only from a biological perspective, but also taking into account legislative and socio-economic factors and the role of communication;
- develop subject-specific research and generic skills necessary for further research and employment, such as underpinning knowledge, practical and analytical skills, work experience, research project management, use of technology and communication media.

The specific aims of the programme are to:

- Provide the educational and resource environment which will enable students with a background in science to develop:
  - an understanding of the living world from a multi-disciplinary and interdisciplinary perspective;
  - the field, laboratory, investigative, problem-solving, technical and communication skills necessary to undertake independent investigations and analyses of wildlife conservation problems at an advanced level, and the presentational skills necessary to communicate their findings to audiences with a variety of backgrounds;
  - the skills needed by a literate, numerate, technologically agile student capable of independent learning.

- Create a friendly, supportive and contemporary atmosphere that will enable individual students to use the whole learning experience at UWE to create a graduate foundation, on which they can develop their future careers and on-going social and educational development as independent lifelong learners;

Part 2: Educational Aims of the Programme

- Provide a curriculum that is enhanced by the strong relationship between teaching, research, and professional practice and informed by employers.

MSci Wildlife Ecology and Conservation Science:

This programme has been developed in consultation with employers so provides graduates with the knowledge and skills necessary to work effectively in the field of national and international wildlife conservation and ecological research. The programme aims to develop in students an in-depth and advanced understanding of the scientific study of wildlife, the diversity of living organisms and their habitats, and the practical steps that can be taken for effective conservation. The programme includes work experience, offers a placement year, and provides opportunities for students to develop generic skills necessary for employment, such as practical and analytical skills, project management, use of technology and communication media.

Part 3: Learning Outcomes of the Programme

The Learning outcomes of the programme are mapped to the **compulsory modules** as shown below. This is to demonstrate that all students are able achieve all programme outcomes although many outcome will be re-enforced through **optional modules**.

Learning Outcomes:	USSK5C-30-1 Life on Earth	USSJFB-30-1 The Earth	USSK5D-30-1 Wildlife & Society	USSK5B-30-1 Field Skills	USSK5G-30-2 Env Field Techniques	USSK5E-30-2 Conservation in Practice	USSK5F-30-2 Ecology & Ecosystem Protection	USSK5H-30-2 Wildlife Ecology	USSK5K-30-3 Research Project	USSKBC-30-3 Dissertation Project	USSK5J-30-3 Contemporary Conservation Science	USSKM8-30-M Sustainable Futures	USSKM5-30-M Research with Impact	USSXXXUSSKM6-60-M Research in Practice
A) Knowledge and understanding of:														
Structure and function of the natural world	X	X	X	X	X		X							
Processes which shape the natural world		X	X	X	X						X			
Relationship between plants, animals, and environment	X	X		X		X	X	X			X			
Terminology, nomenclature, classification	X			X	X			X						

Part 3: Learning Outcomes of the Programme															
Threats to biodiversity, conservation approaches			X	X		X	X					X	X		X
Methods for acquiring, analyzing, interpreting data	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Awareness of their contribution to conservation			X			X	X					X	X	X	X
Importance of multi-disciplinary & Interdisciplinary approaches		X	X	X	X	X	X			X	X	X	X	X	X
Importance of subject and generic skills for employment			X	X	X	X						X			

(B) Intellectual Skills

Using theories and paradigms		X		X	X		X	X	X	X		X			X
Analyse, synthetise, summarise information	X	X	X	X	X	X	X	X	X	X	X		X	X	X
Collect evidence, test/develop hypotheses				X	X		X	X	X	X				X	X
Apply knowledge to problems	X	X			X	X	X		X	X	X		X	X	X
Independent learning, self-manager				X	X	X			X	X	X		X	X	X
Appreciate moral, ethical issues around investigation	X		X	X	X	X				X	X		X	X	X

(C) Subject/ Professional/Practical Skills

Plan, conduct report on investigation				X	X				X	X				X	X
Collect, record, analyse data	X	X		X	X	X	X	X	X	X			X		X
Deal with complex issues systematically and creatively,													X	X	X
Undertake lab, field investigations	X	X		X	X		X	X	X	X	X		X		X
Demonstrate identification skills	X			X	X	X		X							
Field surveys for management plans				X				X							
Use of technology for mapping, analyzing data				X	X				X	X	X				
Undertake research project					X				X	X					X
Reference work and compare to others		X	X				X	X	X	X	X		X	X	X

(D) Transferable skills and other attributes

Make sound decisions in complex and unpredictable situations													X	X	X
Use a variety of sources of information		X	X	X	X	X	X		X	X	X		X	X	X
Communicate appropriately using contemporary technologies				X	X	X			X	X	X		X	X	X
Appreciate issues of accuracy uncertainty	X	X		X	X	X			X	X			X		X
Prepare, process, interpret data	X	X		X	X	X	X	X	X	X	X		X		X
Solve numerical problems	X	X		X	X	X			X	X					X

Use internet appropriately for transfer of information			X	X	X	X	X	X	X	X	X		X	X	X
Respect views of others	X	X	X	X	X						X		X	X	X
Evaluate individual performance		X		X	X	X					X		X		X
Active & independent learning	X	X	X	X	X	X	X	X	X	X	X		X	X	X
Skills for employment & research			X	X	X	X			X	X	X		X	X	X

Part 4: Student Learning and Student Support

The Wildlife Ecology and Conservation Science programme is a multi-disciplinary degree which has been developed in consultation with employers so provides graduates with the knowledge and skills necessary to work effectively in the field of national and international wildlife conservation, or for a career in conservation research. The modules allow students to develop an in-depth understanding of the scientific study of wildlife, the diversity of living organisms and their habitats, and the practical steps that can be taken for effective conservation. The programme includes work experience, offers a placement year, and provides opportunities for students to develop generic skills necessary for employment, such as practical and analytical skills, project management, use of technology and communication media. In addition, the final, research-focused year offers an extended research project in an area of the student's choice, working within a UWE-based research team, with a nationally or internationally-recognised conservation organisation, in industry, or with a government or non-governmental organisation. This research project is supported by masters-level research skill training, including advanced practical skills for wildlife conservation (eg. use of eDNA and remote sensing), as well as a project management, science communication and outreach. The programme is part-delivered at Bristol Zoo Gardens which allows the taught material to be delivered in context and further links to the world of work.

Transition to HE and student support
The MSci Wildlife Ecology and Conservation Science is managed as part of a suite of programmes within the Biological and Environmental Sciences & Science Communication Subject Group. Year handbooks are provided at each level providing information on the Faculty, the University, its regulations and procedures. Detailed information is distributed in guides for each module. At the start of the programme, students undertake a comprehensive induction programme and are introduced to university regulation, aims of the programme, laboratory working, support systems (e.g. Drop-ins, PAL) and their personal tutor. Students are allocated a personal tutor and become part of a tutor group (typically < 15 tutees). Adjusting to university life is challenging for Level One students and to help with this transition students attend a short residential field course early in Semester one. Students are supported during their time at UWE by a personal tutor, student advisors and module leaders. Guidance on year issues is overseen by the Programme Manager, who is supported by the Teaching Team and Associate Heads of Department. A dedicated HE Co-ordinator at Bristol Zoo will oversee delivery of teaching on site at Bristol Zoo. Issues relating to groups of students are dealt with through the Student Rep / Staff Forum (SRSF) that includes student representatives, who also meet with the Programme Manager on a regular basis. Students who elect to undertake a placement year, are allocated a placement tutor who will maintain contact, plan a visit where possible and provide support and liaise with work supervisors. For all students, access to academic staff and the student advisors is via e-mail or by personal access, with most staff offering an office-hours policy facilitating the booking of appointments. The central University counselling and support services provide assistance and guidance for students with special needs. The programme welcomes mature students and students with disabilities. When possible, and

following individual consultation, adjustments are made to practical and field work to allow all student to achieve the learning outcomes of the programme.

Teaching and Learning facilities
The University library provides an extensive range of literature that supports the programme. Additional material is held in the Field Studies Resource Room and in the library at Bristol Zoo. Students have 24-hour access to computers, and IT support services are available within the University's Computing Helpdesk. The University's Virtual Learning Environment, hosted by Blackboard has been developed to enhance the student's learning experience and provide comprehensive support on a module-by-module basis. Support includes, access to teaching materials, links to relevant online resources and background reading, facilities for interaction and coordination during group work (e.g. blogs, wiki's) and communication between tutors and students. The Faculty has a well-equipped range of general and specialist laboratories, a dedicated field laboratory, large glasshouse used for teaching and project work, dedicated project laboratory a wide range of specialist scientific equipment that is available for use by the students at appropriate stages in their study programme.

Teaching facilities for students when studying at Bristol zoo include the Conservation Education Centre including 4 teaching rooms, library, laboratory, computer room and student common room access to the zoo's extensive collection of animals at the Clifton Zoo site and 'Wild Place' site North Bristol.

Preparation for the world of work
An aim of this programme is to produce gradates that are fit for work. To achieve this objective student are introduced to the world of work at Level One. This occurs within the modules 'Field Skills' and 'Wildlife and Society'. Here student are introduced to research being carried out by staff at the university, meet a range of local conservation employers, investigate employment opportunities in tutor groups and undertake organised work experience during visits to local employers such as Bristol Zoo. At Level 2 students undertake organised mini-placements (within 'Conservation in Practice') with local providers to gain work experience. Students are encouraged to take the Placement Year to build up their work experience skills and this occurs between Levels 2 and 3. Scientific and generic careers events are organised throughout the year for student at all levels and career advice and *C.V.* preparation is a key aspect of tutor group session. Enterprise, social enterprise and consultancy are all key topics delivered in the compulsory third year module 'Contemporary Conservation Science' and are part delivered by the Careers Service.

Field work is of fundamental importance to the development of employability skills and understanding in wildlife conservation, and occurs across a range of modules at all levels, including half-day, whole day, and residential visits. In particular, residential field trips take place at Level 1 (compulsory), Level 2 (compulsory) and Level 3 (optional modules). The costs associated with compulsory field trips are generally met by the Faculty; however, optional trips may incur an additional cost. All third year students undertake an independent research project. This is supported by compulsory modules at Levels 1 and 2 during which students develop the skills to project plan, self-manage, collect data, analyse and interpret data and write scientific reports. In addition, in their final (Master-level) year, students undertake an extended research project, developing the advanced research skills required to take on PhD or other research-based post-graduate opportunities.

In addition to the practical work experience opportunities throughout this programme, technology is used to enhance teaching, learning and employability. Wildlife scientists are often required to communicate and disseminate their findings through a variety of modern media, to a range of audiences. A number of the technologies incorporated within this programme link directly to

feedback from employers on relevant graduate skills (e.g. GIS, data bases, webpages, blogs, new media).

Teaching and Learning, Technology Enhanced Learning (TEL)
In order to support students during their transition to HE and to help students become independent learners, taught sessions at Level 1 are a mixture of interactive lectures, tutorials, workshops, laboratory, field and computer practical's. During this year students are taught the skills necessary to engage with appropriate technologies to allow a gradual move towards facilitated learning at Levels 2 and 3. The taught sessions at UWE utilise TEL to support pedagogy of Inductive Learning where the students engage in facilitated activities such as debates, problem based learning, group working, research etc. Integral to this programme is the use of subject based as well as generic use of technologies. For instance, data analysis and modelling, mapping (GIS), wildlife film-making, communication for conservation, are subject areas reliant on a range of contemporary technologies. In addition modern technologies are incorporated as vehicles of learning (e.g. blogs, web pages, data bases) and as vehicles for learning through assessment (e.g. online portfolio's, online tests, wiki's, press releases etc.)

At UWE, Bristol there is a policy for a minimum average requirement of 12 hours/week contact time over the course of the full undergraduate programme. 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 Wildlife Ecology and Conservation Science programme, teaching is a mix of scheduled learning, independent learning and placement learning.

Scheduled learning includes interactive lectures, lectorials, tutorials, seminars, project supervision, demonstration, laboratory, computer and field practical classes and workshops; fieldwork; external visits; film-making and work based learning. Scheduled sessions may vary slightly depending on the module choices made.

Independent learning includes hours engaged with essential reading, case study preparation, scientific research activity, attending professional seminars, assignment preparation and completion, revision etc.

Placement learning: includes mini-placements of work experience and may also include a professional practice placement year.

Description of any Distinctive Features
The Wildlife Ecology and Conservation Science programme has been developed in consultation with a range of stake holders and has the following key features:

- Part-taught and delivered at Bristol Zoo Gardens

- Designed to support 4 career pathways in addition to being a science graduate (Consultancy - Enterprise; Contemporary techniques; Media & film; International wildlife conservation)

- Familiarisation with both local and global partners/employers

Part 4: Student Learning and Student Support

- Built in 'organised' voluntary work with local partners

- Built in field work and field experience

- Attractive bespoke modules on Wildlife & Media; the Primates

- Local to global scientific study of wildlife to attract international students.

- Built in key skills such as GIS, IT, Modelling, identification, communication, contemporary conservation science and technology and optional skills in SCUBA and assessing tropical wildlife.

- Opportunities to develop advanced research skills including cutting-edge techniques for studying the ecology and conservation of wildlife.

Part 5: Assessment

Approved to [University Regulations and Procedures](#)

Assessment Strategy

A range of assessment methods are employed to monitor student attainment of the full range of Learning Outcomes. Assessment incorporates the Department's assessment strategy and The QAA Code of Practice on Assessment of Students. The principles, procedures and processes of assessment for each module are described in the module booklet, which is provided to each student and available online at the start of the module. Further, these assessments are summarised in the Assessment Calendar provided via the UWE Portal, which also facilitates the appropriate scheduling of assessment loading. The third year optional modules (15 credits) have semester based delivery. This allows assessments to be spread across both semesters for even loading. In the final, masters-level year, the Sustainable Futures module is delivered one day per week in the first semester, whilst the Research in Practice and Research with Impact modules will run concurrently over semester one and two. The material covered in the Research with Impact module will be carefully organised to best support student activity in the Research in Practice module, For example, in the first semester of Research with Impact, students will focus on material directly linked to the research governance process, engaging with scientific literature, and data analysis techniques, whilst in the second semester the focus will shift towards data interpretation, presentation and communication.

Effective learning is achieved by employing a range of assessment approaches across the suite of modules that recognise differential approaches to learning. These include opportunities for work-based learning, placements and field work, and "real-world" assignments, delivered by university staff, through our collaborations with Bristol Zoo, and in partnership with a range of other conservation organisations. The development of a flexible, inclusive and accessible curriculum ensures a high quality learning experience for all students. The programme incorporates a range of innovative and novel assessments, many utilizing new technologies.

Technology Enhanced Learning (TEL) is integral to the subject matter within this programme. Many taught topics are technology rich and TEL is also used to supplement learning and to help student learn through assessment. A range of modern technologies are incorporated across the programme, but there is also the opportunity for repetition, thus re-enforcing and enhancing skills development. This is particularly important between levels as it provides opportunities for students to become proficient with these media in key areas. The need for proficiency and an emphasis on technology aided skills was identified by employers (e.g. GIS, new media, blogs, web pages, data bases, press releases) and this feedback was used to inform the assessment strategy.

The Assessment Strategy has been designed to support and enhance the development of both subject-based and generic key skills and allow students to realise their true potential. The focus is on assessments that link directly to employability as well as assessments for learning. Assessments are designed to achieve the learning outcomes for each module and this is described on the module specification. The range and progression of assessment methods are shown below.

Assessment Map

Part 5: Assessment

The programme encompasses a range of **assessment methods** including; practical exams, written exams, open book exams, posters, presentations, practical reports, field logs, portfolios, taxonomic collection, management plan, and a media pitch. These are detailed in the following assessment map:

Assessment Map for MSci Wildlife Ecology and Conservation Science

Note, A = Component A; B = Component B; P/F = Pass or Fail and the number in brackets represent the module weighting

	Module	Unseen Written Exam	Open Book Written Exam	Practical Exam	Practical Skills Assessment / Taxonomic Collection	Oral assessment and/or presentation	Investigative Report / case study	Practical or Field Report	Research Project Report	Skills Portfolio / Reflective portfolio
Compulsory Modules Level 1	USSK5C-30-1 Life on Earth	A (40)					B (18)	B (42)		
	USSJFB-30-1 The Earth	A (30)		A (10)			B (24)	B (36)		
	USSK5D-30-1 Wildlife & Society	A (40)				B (20)	B (40)			
	USSK5B-30-1 Field Skills		A (40)					B (30)		B (30)
Compulsory Modules Level 2	USSK5G-30-2 Environmental & Field Techniques					A (40)		B (20)		B (40)
	USSK5E-30-2 Conservation in Practice				A (40)		B (30)	B (30)		
	USSK5F-30-2 Ecology & Ecosystem Protection	A (50)					B (30)			B (20)
	USSK5H-30-2 Wildlife Ecology	A (50)			B (25)			B (25)		
Compulsory Modules Level 3	USSK5K-30-3 Research Project					A (20)		A (20)	A (60)	
	USSKBC-30-3 Dissertation Project					A (20)		A (10)	A (70)	
	USSK5J-30-3 Contemporary Conservation Science					B (20)	B (30)			A (50)
Optional Modules Level 3	USSK56-15-3 Primate Ecology & Conservation	A (60)						B (40)		
	USSKN6-15-3 Global Forest Systems	A (60)					B (40)			
	USSKNB-15-3 Sustainable Food Production	A (60)					B (40)			
	USSK55-15-3 Marine Ecosystems	A (60)						B (40)		
	USSK58-15-3 Remote Sensing & GIS				A (60)		B (40)			
	USSK59-15-3 Tropical Expedition			A P/F			B (30)	B (70)		
	USSK5A-15-3 Wildlife, Film & Media					A (40)				A (60)

Part 5: Assessment									
	USSK57-15-3 Professional Practice in Applied Sciences *(study & assessments for this module are carried out whilst on placement)*				A P/F	A P/F	A P/F			A P/F
	USSKNT-15-3 Wildlife Forensics and Conservation	A (50)					B (50)			
Compulsory Modules Level 4	**USSKM6-60-M** Research in Practice					A (30)			A (20, 50)	
	USSKM5-30-M Research with Impact					A (40)	B (24)			B (36)
	USSKM8-30-M Sustainable Futures									

*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.**

ENTRY

	Compulsory Modules	Optional Modules	Interim Awards
Year 1	USSK5C-30-1 Life on Earth	None	Certificate of Higher Education: Wildlife Ecology and Conservation Science
	USSJFB-30-1 The Earth		Other requirements: 120 credits of which not less than 100 are at Level 1 or above.
	USSK5D-30-1 Wildlife and Society		
	USSK5B-30-1 Field Skills		

	Compulsory Modules	Optional Modules	Interim Awards
Year 2	USSK5E-30-2 Conservation in Practice	None	Diploma of Higher Education: Wildlife Ecology and Conservation Science
	USSK5G-30-2 Environmental and Field Techniques		
	USSK5F-30-2 Ecology and Ecosystem Protection		Other requirements: 240 credits at which not less than 100 are at Level 2 or above and 120 are at Level 1 or above.
	USSK5H-30-2 Wildlife Ecology		

Year Out:
Students may elect to spend a year out working for an organisation, in an appropriate placement to gain relevant work experience. Credit is achieved through the USSK57-15-3 Professional Practice in Applied Sciences module.

	Compulsory Modules	Optional Modules	Interim Awards
Year 3	USSK5K-30-3 Research Experimental Project *OR* USSKBC-30-3 Research Dissertation Project	USSK56-15-3 Primate Ecology & Conservation	BSc Wildlife Ecology and Conservation Science
	USSK5J-30-3 Contemporary Conservation Science	USSKN6-15-3 Global Forest Systems	300 credits of which at least 60 must be at level 3, a further 100 at Level 2 or above and a further 140 at Level 1 or above
		USSK55-15-3 Marine Ecosystems	BSc (Hons) Wildlife Ecology and Conservation Science
		USSK58-15-3 Remote Sensing & GIS	360 credits of which not less than 100 are Level 3 or above, and 100 are at Level 2 or above, and 140 are Level 1 or above
		USSK59-15-3 Tropical Expedition	
		USSK5A-15-3 Wildlife, Film & Media	
		USSK57-15-3 Professional Practice in Applied Sciences	
		USSKNB-15-3 Sustainable Food Production	
		USSKNT-15-3 Wildlife Forensics and Conservation	

	Compulsory Modules	Optional Modules	
Year 4	USSKM5-30-M Research with Impact	None	**Highest Award** MSci Wildlife Ecology and Conservation Science
	USSKM8-30-M Sustainable Futures		480 credits of which not less than 120 are Level M, and not less than 220 are Level 3 or above, and not less than 320 are at Level 2 or above, and 460 are Level 1 or above
	USSKM6-60-M Research in Practice		

GRADUATION

Part 7: Entry Requirements

The University's Standard Entry Requirements apply. The UCAS points tariff will be reviewed on a regular basis and published for new applicants. However, an applicant to this programme will typically have an A-level Grade C (or equivalent) in a science subject (Biology preferred) and have GCSE's in English Language, Maths and Double Science at grade C or above.

Non-standard applicants without appropriate A-levels, or an equivalent qualification, will be considered on a case-by-case basis.

Part 8: Reference Points and Benchmarks

The Framework for Higher Education Qualifications

The learning outcomes have been developed with reference to the qualification descriptors used in the QAA Framework for Higher Education Qualifications. In particular, the learning outcomes for the modules in the final (Masters) Year are considered consistent with the QAA's descriptor for a higher education qualification at level 7: Master's degree. Graduates of the programme achieving an MSci classification will have developed a systematic understanding and critical awareness of current problems and new insights in key aspects of wildlife ecology and conservation science, much of which is at, or informed by, the forefront of the academic discipline. In addition, graduates will have developed a comprehensive understanding of how established techniques of research and enquiry are used to create and interpret knowledge in their discipline.

Subject Benchmark Statements

There are currently no official QAA benchmark statements, nor statements from accrediting bodies, for postgraduate studies of biological or environmental sciences.

The first three (BSc) years of the programme map well to the Biosciences benchmark statement and, in particular, to its subject specific and generic learning outcomes, as described in the Programme Specification. The Biosciences benchmark Statement also provides a description of subject standards for degrees in Ecology and Environmental Biology which is a good match to both the subject areas covered and the standards achieved by students on the BSc part of the programme.

In addition, the following key concepts and priorities highlighted in the Biosciences benchmark statement were used to inform programme design:

All students should have at least some appreciation of…studies at a variety of levels from molecules to populations. This programme focuses primarily on the study of organisms, populations, communities and ecosystems, although fundamental biological concepts that underpin an understanding of wildlife ecology and conservation, such as physiological processes and knowledge of genetics and evolution, are covered (for example at Level 1 in *Life on Earth* and at Level 2 in *Wildlife Ecology*).

Students should develop competence in comparing the merits of alternative hypotheses and receive guidance in terms of how to construct experiments or make observations to challenge them. In all modules, students will be encouraged to explore a range of hypotheses both through their own experimentation, and through the consideration of case studies which both support and refute

current paradigms. These skills are developed in the second year when students undertake a group research project in *Environmental and Field Techniques.* Competence is further developed and assessed to an advanced degree in the Final Year independent *Research Project*, in which students are expected to devise and undertake original research and to critically compare their findings with existing knowledge and understanding in their chosen subject area.

The biosciences are essentially practical and experimental subjects. This programme places much emphasis on practical work in the broadest sense, including field and laboratory work, computer-based exercises, group and individual project work, literature-based investigations and utilizing communication technologies. In particular, many students will chose to undertake an independent research project that involves a substantial amount of practical or experimental work, although entirely desk-based studies are relevant in some areas of investigation. In addition, many of the modules contain a substantial amount of practical work, not least through the residential field trips in *Field Skills, Environmental and Field Techniques, Marine Ecosystems,* and the *Tropical Expedition*, as well as half and full-day visits undertaken in other modules.

SEEC credit level descriptors (2010)

SEEC credit level descriptors have been used to establish the level of the programme and its modules, and to inform the learning outcomes and assessment criteria at level 4 (Cert. HE), level 5 (Dip. HE), level 6 (BSc), and level 7 (Masters).

These credit levels descriptors inform the following areas:
- The development of subject specific knowledge and understanding, generic cognitive and intellectual skills, key/transferrable skills, and subject specific practical skills;
- Teaching, learning and assessment strategies that deliver, ensure and assess the attainment of these levels;
- The programme level learning outcomes that are reinforced by the modular learning outcomes, teaching, learning and assessment strategies described in individual module specifications.

UWE 2020 Strategy

Our programmes are designed to align with the university's strategic goals around teaching and learning. These include a student-centred approach to learning, delivered via a range of learning approaches in fit-for-purpose and future-focused learning environments. By consulting with local and national employers, and through our strategic partnership with Bristol Zoo Society, we ensure that our teaching has real-world relevance. The curriculum is designed to develop the range of subject-specific and generic employability skills that students will need to be effective in the world of work, through embedded work experience, internships and placement years, so that our graduates are ready and able to make a positive contribution to society in their future careers.

Education for Sustainable Development
By the nature of this course, sustainable development is a key tenet which runs through every aspect of the teaching and delivery, and all Knowledge and Understanding Learning Outcomes are relevant to Education for Sustainable Development (ESD) as defined by the QAA/HEA ESD guidelines. In particular, outputs from the Master's level research module have the potential to further our understanding of key wildlife conservation issues, and may offer potential solutions to aid conservation practitioners in the field.

Part 8: Reference Points and Benchmarks

Consideration of feedback from stakeholders: schools & colleges, current students, graduates and employers.

The development of the MSci in Wildlife Ecology and Conservation Science has benefited from the recent extensive employer consultation exercise carried out as part of the development of the associated BSc programme, as well as more recent consultation in the subject area for the new MSc in Advanced Wildlife Conservation in Practice programme. Key personnel from the Wildfowl and Wetlands Trust (Slimbridge); Somerset Wildlife Trust; Worldwide fund for Nature (WWF-UK); Bristol Zoo Gardens and Bristol City Council were interviewed. All organisations considered that the consultation was an excellent approach to programme development and were extremely helpful in highlighting key skills for graduate employability, providing ideas for content and offers of work experience opportunities. Common themes emerged from these meetings and so in response to a request for proficiency in Geographical Information systems (GIS), data analysis, scientific writing, use of data bases, field based skills and communication skills, there are skills modules at all levels that address these areas e.g. *Field Skills*; *Environmental and Field Techniques*; *Conservation in Practice*; *Contemporary Conservation Science*; *Research Project, Research with Impact and Research in Practice*. All organisations were impressed by the idea of 'built-in' voluntary work and offered work experience opportunities.

In addition, a recent UWE survey of over 80 employers in the South-West identified transferable skills as top of their list of requirements from any graduate job applicant. These skills included all forms of communication (report writing, oral communication, Powerpoint presentation, data handling, summarising information, lay and scientific, and appropriate communication with peers and seniors) plus all elements of project management (such as planning, working to deadlines, managing multiple tasks, prioritising, working under pressure).

Existing students on the BSc (Hons) Wildlife Ecology and Conservation Science programme have also been consulted. Whilst not all wishing to continue to a Masters level, they liked the flexibility and degree of choice that the MSci structure offers, and recognized that it provides a useful underpinning for those wishing to go into further research on graduating.

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 [University's website](#).

FOR OFFICE USE ONLY

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