University of the West of England
BRISTOL

PROGRAMME SPECIFICATION

Section 1: Basic Data

Awarding institution/body	University of the West of England
Teaching institution	Filton College
Delivery Location(s)	Bristol Zoo Gardens/Filton College
Faculty responsible for programme	Health and Life Sciences
Modular Scheme title	
Professional Statutory or Regulatory Body Links (type and dates)	
Highest award title	FdSc Integrated Wildlife Conservation
Default award title	
Interim award titles	Cert.HE Integrated Wildlife Conservation
UWE progression route	BSc (Hons) Integrated Wildlife Conservation
Mode(s) of delivery	Full/Part time
Codes **UCAS code** F750	**JACS code** CD34
ISIS code	**HESA code**
Relevant QAA subject benchmark statements	Biosciences
On-going/valid until* (*delete as appropriate/insert end date)	On-going
Valid from (insert date if appropriate)	September 2011

Original Validation Date: 13th May 2011

Latest Committee Approval: Quality and Standard Committee **Date:** July 2011
Version Code: 2

Section 2: Educational aims of the programme

Context

The FdSc Integrated Wildlife Conservation programme is a two year full-time, or typically four year part-time, programme designed to develop in students an understanding of the relationships between human beings, wildlife and the natural world, and to equip graduates with the knowledge, experience and skills required for a career in wildlife conservation. It takes a scientific approach to the study of wildlife conservation issues and is underpinned by a sound understanding of relevant biological principles. This knowledge is then integrated with a consideration of how humans interact with wildlife, in particular where these interactions are detrimental to wildlife, humans, or both, and investigates how such conflicts may be resolved through the implementation of sustainable development principles. It explores the motivations behind human behaviours that have a detrimental impact on biodiversity, and considers how communication strategies might best be developed and implemented to effect more wildlife-friendly behaviours. It also provides an opportunity for those students wishing to progress further in Higher Education to continue to a level 3 BSc (Hons) award programme in Integrated Wildlife Conservation at UWE.

General Aims

The programme will enable students to:

- explore the complexity and diversity of the living world, its evolution and function, at organism, population, community and ecosystem scales, and its relationship with the physical environment;
- understand the impact of human activities on the living world and the resulting threat to global biodiversity;
- integrate information from a range of disciplines in order to evaluate possible solutions to biodiversity loss, not only from a biological perspective, but also taking into account socio-economic, legislative and political factors;
- develop academic, generic, practical and employability skills which will equip students with the graduates skills needed for gaining employment and being successful at work;
- progress to further study in Higher Education within Integrated Wildlife Conservation and similar programmes.

Specific Aims

The specific aims of the programme are to:

- provide the education and resource environment which will enable students with a background in biology to develop:
  - a strong scientific understanding of the principles and processes that underpin wildlife conservation;
  - an understanding of the subject from a multidisciplinary and interdisciplinary perspective;
  - the field, laboratory and investigative skills necessary to undertake independent investigations of wildlife conservation problems;
  - the presentational skills necessary to communicate their findings to audiences with a variety of backgrounds, with the aim of promoting more wildlife-friendly behavioural patterns;
  - the skills of a literate and numerate student capable of independent learning.
- provide the opportunity for the development and practice of employability and professional skills through work-based learning;
- provide a curriculum that is enhanced by experience from research, consultancy, and professional practice;
- promote and widen access to careers in wildlife conservation to applicants with non-standard entrance requirements.

Section 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 areas described below. These have taken account of the relevant subject benchmarks and the QAA Foundation Degrees benchmark.

A Knowledge and understanding

Learning outcomes	Teaching, Learning and Assessment Strategies
A Knowledge and understanding of: 1. a broad-based core covering the major elements of wildlife conservation together with specialised in-depth study of some aspects of the subject area. 2. the need for an interdisciplinary and multidisciplinary approach in advancing knowledge and understanding of wildlife conservation. 3. the essential facts, major concepts, principles and theories associated with wildlife conservation. 4. the influence on living systems of human activities and vice versa. 5. the basic experimental skills appropriate to wildlife conservation. 6. information and data, their setting within a theoretical framework, accompanied by critical analysis and assessment. 7. the terminology, nomenclature and classification systems relevant to wildlife conservation. 8. methods of acquiring, interpreting and analysing biological information. 9. the contribution of the subject to the development of knowledge about the diversity of life and its evolution. 10. a range of communication techniques and methodologies, including data analysis and the use of statistics. 11. current developments in wildlife conservation and the philosophical and ethical issues involved. 12. the applicability of wildlife conservation to the world of work.	**Teaching/learning methods and strategies:** Outcomes 1-12 are integrated across the programme and are met through a variety of methods including lectures, residential and non-residential field trips and visits, practicals, case-studies, problem-based learning exercises, tutorials, seminars, and work-based learning. These are fully supported by excellent library facilities at UWE, Filton College, and Bristol Zoo, and UWE online (Blackboard). Small group teaching and substantial contact time for each module promotes an environment where groups or individual students can access additional tutor support where necessary. Acquisition of 2 is implicit in the structure of the degree programme, and is addressed explicitly at levels 1 and 2 in those modules exploring the relationships betweenwildlife,society and sustainable development.. Outcome 10 is addressed through the field and research skills modules at levels 1 and 2, and further developed at level 2 in themes around the communication of conservation messages. Many of the outcomes are implicit in the Work-based Learning modules where theory and knowledge are integrated with professional practice. Throughout, the learner is encouraged to undertake independent reading both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject. The programme is structured to allow students to take increasing responsibility for their learning and prepare them for success at higher levels. It is anticipated that by the end of level 2, students will have the ability to learn independently. **Assessment:** Knowledge and critical understanding is assessed using a variety of methods including seen and unseen examinations, assessed practicals, seminars, field work and laboratory reports, computer-based exercises, data analysis, presentations, eer-assisted learning, and case studies. The diversity of assessment reflects the interdisciplinary nature of the subject area. Opportunities exist for both formative and summative assessment.

B Intellectual Skills

B Intellectual Skills	**Teaching/learning methods and strategies**
Students will be able to: 1. recognise and apply subject-specific theories, paradigms, concepts and principles. 2. analyse, synthesise and summarise information critically, including published research or reports. 3. obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses. 4. apply subject knowledge and understanding to address familiar and unfamiliar problems. 5. recognise the moral and ethical issues of investigations and appreciate the need for ethical standards and professional codes of conduct.	Intellectual skills are developed through individual and team project work, student-centred learning, laboratory and fieldwork, data handling and interpretation exercises, and seminar work. **Assessment** Assessment of intellectual skills is through the full range of methods identified in section A. In particular, the wide range of different types of coursework including various forms of reports/essays, group project work, problem-solving exercises and presentations, is important in assessing the student's ability to demonstrate generic intellectual skills.

C Subject, Professional and Practical Skills

C Subject/Professional/Practical Skills	**Teaching/learning methods and strategies**
Students will be able to: 1. read and use appropriate literature with a full and critical understanding. 2. give a clear and accurate account of Integrate Wildlife Conservation as a subject, marshal arguments and engage in debate and dialogue with specialists and non-specialists, using appropriate scientific language. 3. recognise that statements should be tested and evidence is subject to assessment and critical evaluation. 4. employ a variety of methods to investigate, record and analyse material. 5. think independently, set tasks and solve problems. 6. develop competency in the basic experimental skills appropriate to the study of wildlife conservation. 7. design, plan and conduct experiments using appropriate techniques in the field and laboratory. 8. collate, analyse and present both qualitative and quantitative data working individually or in groups. 9. undertake field and laboratory investigations in a responsible, safe and ethical manner, paying due attention to risk assessment, health and safety regulations, animal welfare, rights of access, and showing awareness of potential impacts to individual stakeholders and the environment. 10. cite and reference work in an appropriate manner. 11. develop a variety of advanced employability skills relevant to a career in wildlife conservation or related fields.	Skills 1-10 are developed throughout the programme. In particular, skills 5, 7, 8, 9 and 10 are developed during laboratory and fieldwork practical sessions across modules, supported by the field and research skills modules at levels 1 and 2. Employability skills (skill 11) are developed primarily in the work experience modules at level 1 and 2, but underpinned by the subject-specific knowledge and skills, and generic skills, gained across the programme. Students are encouraged to debate and discuss key themes in wildlife conservation in all modules. Similarly, students are encouraged to think independently and develop their problem-solving skills (skill 6) across all modules, but these skills are particularly developed in the work-based modules at levels 1 and 2. In developing these professional and practical skills, students have a unique opportunity to use the facilities offered by Bristol Zoo. These can support student learning across the curriculum, from an understanding of wildlife biology and animal behaviour, through to the practical applications of communication strategies with the visiting public. **Assessment** Skills 1, 2, 3 and 10 are assessed in all written coursework, including essays, laboratory and fieldwork reports. Skills 4, 6, 7, 8 and 9 are assessed through projects, laboratory and field-based work especially in the skills-based and practical modules Additionally, skill 5 is assessed in the work experience modules at levels 1 and 2.

D Transferable Skills and other attributes

D Transferable skills and other attributes	**Teaching/learning methods and strategies**
Students will be able to: 1. receive and respond to a variety of sources of information (eg. textual, numerical, verbal and graphical). 2. carry out sample selection; record and analyse data in the field and laboratory; ensure validity, accuracy, calibration, precision, replicability and highlight uncertainty during collection. 3. prepare, process, interpret and present data, using appropriate qualitative and quantitative techniques, statistical programs, spreadsheets and programs for presenting data visually. 4. solve problems by a variety of methods, including the use of computers. 5. identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles. 6. recognise and respect the views and opinions of other team members. 7. evaluate performance as an individual and a team member; evaluate the performance of others. 8. develop the skills necessary for self-managed and lifelong learning (eg. working independently, time management and organisational skills). 9. identify and work towards targets for personal, academic and career development. 10. develop an adaptable, flexible and effective approach to study and work. 11. use the internet and other electronic sources critically as a means of communication and a source of information.	Skills 1-11 are developed throughout the programme. Those skills dealing specifically with experimental design and analysis (skills 2, 3, and 4) are developed particularly in the research methodology/numeracy spine of the programme. Team-working skills (skills 5, 6, and 7) are developed in project work in level 1 and 2 modules, as well as through work experience, and they are an integral part of field and laboratory work across the programme. Skills for independent and life-long learning (skills 8, 9, and 10) are addressed explicitly through the university's Graduate Development Programme (in the skills modules), and are developed through the structure of the assessment schedule and other student support facilities. **Assessment** All of these skills contribute to the student's general performance across the programme and as such, achievement is evidenced by the overall grade of award. The wide range of different forms of assessment and coursework requires the student to demonstrate the full range of transferable skills. In particular, skills 5, 7, 8 and 9 are assessed in the work experience modules at levels 1 and 2.

Section 4: Programme structure

Use next page to provide a structural chart of the programme showing:

- *Level and credit requirements*
- *Interim award requirements*
- *Module diet, including compulsory/core/optional modules*

ENTRY
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level 1	**Compulsory modules** • USSJ99-20-1 Ecology and Evolution • USSJPV-20-1 Wildlife Biology • USSJPW-20-1 Wildlife and Society • USSJ9D-20-1 Physical Environmental Systems • USSJPN-20-1 Field Skills (includes GDP) • USSJPX-20-1 Work Experience in Wildlife Conservation 1 **Core modules** • N/A	**Interim Awards:** **CertHE Integrated Wildlife Conservation** • Credit requirements: 120
level 2	**Compulsory modules** • USSJGA-20-2 Conservation Biology • USSJPY-20-2 Animal Behaviour for Wildlife Conservation • USSJNY-20-2 Effective Communication for Conservation • USSJNX-20-2 Integrating Sustainable Development and Conservation • USSJNW-20-2 Research Skills (includes GDP) • USSJNV-20-2 Work Experience in Wildlife Conservation 2 **Core modules** • N/A	**Interim Awards:** N/A **Award:** **FdSc Integrated Wildlife Conservation** • Credit requirements: 240

→ GRADUATION

Section 5: Entry requirements

Passes in the following subjects at GCSE at grade C or above:

English Language, Mathematics, Double Science plus ONE of the following:

- At lest 160 UCAS tariff points in 2 subjects at Advanced General Certificate of Education (GCE A level) or equivalent, to include Biology; or
- A BTEC National Diploma or Certificate in an appropriate subject area; or
- A Quality Assurance Agency (QAA) recognised Access certificate in a science subject, awarded by an Authorised Validating Agency; or
- Such other European or International qualifications and/or experience which the university considers equivalent to the above; or
- Such other qualifications as may be recognised as equivalent by the Academic Board.

In addition, mature students not meeting the above entry requirements but who can demonstrate extensive relevant experience are also encouraged to apply

Section 6: Assessment Regulations

In accordance with University Academic Regulations and Procedures

Section 7: Student learning: distinctive features and support

Distinctive Features

The FdSc Integrated Wildlife Conservation programme is an interdisciplinary degree exploring the relationship between humans and wildlife. Students analyse the impacts that human activities have on natural systems, and explore ways in which conservation goals can be achieved without compromising societal aspirations. Underpinning this is a consideration of the way in which the public receive messages regarding the need for wildlife conservation, and how they process these messages in relation to their own behaviour, thus supporting the students to develop more effective methods of communication for conservation. The focus of the degree programme is primarily on animals, (although the fundamental roles played by plants and micro-organisms in ecosystem function is highlighted), and on conservation at an international level.

A unique feature of this programme is its delivery at the Education Centre of Bristol Zoo. As well as access to considerable expertise in the field of wildlife conservation, the Zoo Gardens offer an excellent facility for students to study at first hand aspects of animal biology, behaviour and conservation ex-situ, but they are also encouraged to explore in-situ conservation through case-studies and independent research, making extensive use of facilities such as the wildlife image database Arkive. The Zoo also provides excellent opportunities for the practical evaluation of communication strategies, but students are encouraged to develop their own communication skills through other fora, for example the annual Bristol Festival of Nature.

Level 1 is concerned with the development of knowledge and understanding of the principles underlying the natural world, and how these relate to human socio-economic, political, and belief systems. It provides students with a sound scientific understanding of the biological principles underpinning wildlife conservation, including ecology, evolution, and wildlife biology along with the physical factors that shape the natural world.

Level 2 builds on the principles addressed at level 1 by exploring more advanced theory and practice related to wildlife conservation and its relationship to sustainable development. A key theme of level 2 is the investigation of what makes communication strategies effective in terms of changing public beliefs and behaviours.

Students develop the analytical and field skills needed to provide a firm foundation for

conducting individual and group-based research work, along with the evaluation of research conducted by others, through special Skills modules at both levels. In addition, these address a range of transferable skills to allow students to develop as independent learners. Fieldwork is of fundamental importance to the development of skills and understanding in wildlife conservation, and occurs across a range of modules at both levels, including half day, whole day and residential visits. In particular, a residential field trip takes place at level 1 as part of the Field Skills module.

The work-based learning element of the Foundation degree is spread equally across the 2 levels. It may be undertaken as a single block, or integrated throughout the teaching year, offering flexibility in learning experiences. Many students will choose to complete their work placements within Bristol Zoo itself, though there may be opportunities for work experience with other locally-based conservation organisations or other zoos nationally. In addition, opportunities may exist to undertake work-based learning alongside Zoo staff involved in international conservation projects for example in Madagascar, Cameroon and the Philippines. The work-based learning element provides students with the opportunity to expanded their subject knowledge and understanding within the specific context of their placement, as well as developing a range of subject-specific and generic employment skills which will enhance their long-term employment prospects and enable them to make informed choices about possible future careers.

Student Support

This programme is one of a suite of environmental awards managed by UWE. Day-to-day management of the award is undertaken by Filton College staff, with support and input from UWE and Bristol Zoo staff. In particular, the Programme Leader has overall responsibility for the smooth running of the programme, supported at a modular level by named Module Leaders.

Guidance to students on the programme, along with full details of the academic and pastoral support available, is provided in the Programme Handbook which is available to all students at the start of the programme. In addition, module specific information is provided via Module Handbooks, UWE's on-line learning system Blackboard, and dedicated pages on Filton College's intranet FERN. Matters relating to groups of students are addressed through the programme management committee that includes student representatives, the programme leader and the teaching team. For all students, access to academic staff is via email or appointment.

Students benefit from being part of a small cohort, although opportunities exist for them to join fellow students on the Conservation Biology and Environmental Science degrees at UWE for some joint activities. Students also benefit from high levels of staff-student contact, allowing ample opportunity for formative assessment and additional support. In addition to the educational facilities at the Zoo, students are able to use the academic and support facilities offered by Filton College and UWE, including library access, access to UWE online, the intranet and student union. In addition, both Filton College and UWE have support systems in place to help students find and successfully undertake work-based learning placements, including extensive databases of potential employers.

Work-based learning is supported by an Academic Placement Tutor (college-based) and a Placement Supervisor (work-based). Placement Supervisors are responsible for the day-to-day management of the students during their placement, whilst the Academic Placement Tutor provides general support, visits students undertaking work-based learning away from Bristol, as necessary, and is responsible for ensuring that the outcomes for work based learning are being met.

Section 8 Reference points/benchmarks

- *Subject benchmarks*

The learning outcomes have been developed with reference to the qualification descriptors used in the QAA Framework for Higher Education Qualifications and, in particular, the Foundation Degree Qualifications Benchmark. In particular, the following characteristics of the Foundation degree have been considered: employer involvement; accessibility; progression; flexibility; partnership; assessment, particularly of work-based learning; and monitoring and review.

In addition, close consideration was given to the Biosciences Benchmark statement when devising the curriculum, particularly when mapping the Learning Outcomes (section 3). The benchmark statement highlights the importance of taking a multidisciplinary and interdisciplinary approach to the subject, and such an approach is central to this programme, both explicitly, in the issue-based modules, and implicitly, through the suite of modules taken. In addition, the Benchmark Statement emphasises the practical nature of the biosciences, through laboratory and fieldwork, and the need for significant levels of numeracy. Both elements are well catered for within this programme. There is a clearly defined numeracy pathway through the 'Skills' modules, and numeracy skills will be further developed through application in other modules. The programme also places strong emphasis on practical work; students will typically spend at least half their contact time engaged in practical work and the facilities that the zoo has to offer adds a stimulating and varied learning environment.

- *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 participation and engagement with the learning process. The programme seeks to create an environment that will stimulate students to take responsibility for aspects of their learning, while tutors take responsibility for facilitating that 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 student strengths and abilities. Although this document focuses on summative assessment, the programme team recognises the importance of both summative and formative assessment activities, and feedback, as an integral part of the learning and teaching process. All assessments comply with current University Assessment Regulations.

- *staff research projects:*

Staff at Filton College, UWE and Bristol Zoo are actively engaged in research or professional practice, and consequently the programme development, teaching and project work is underpinned and informed by current research and practice.

- *employer interaction/feedback:*

Bristol Zoo Gardens, as representative of the work sector, was intimately involved in the development of the programme, helping to define its vision and shape its broad objectives. It provides work-based learning opportunities at both levels 1 and 2. It has representation at termly Programme Management and annual Quality Monitoring meetings, as well as the opportunity to liaise directly with Filton staff and students on a day to day basis. In addition, its contacts with zoos worldwide, along with the hands-on experience of its staff through on-going conservation projects world-wide, means that it is ideally placed to ensure that the curriculum remains current and relevant, and that students have opportunities for work- and project-based learning experiences that are at the forefront of current conservation thinking

and practice.

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. These are available on the University Intranet.

Programme monitoring and review may lead to changes to approved programmes. There may be a time lag between approval of such changes/modifications and their incorporation into an authorised programme specification. Enquiries about any recent changes to the programme made since this specification was authorised should be made to the relevant Faculty Academic Registrar.