University of the West of England
BRISTOL

PROGRAMME SPECIFICATION

Section 1: Basic Data

Awarding institution/body	University of the West of England
Teaching institution	University of the West of England
Delivery Location(s)	
Faculty responsible for programme	Health and Life Sciences
Modular Scheme title	Applied Sciences
Professional Statutory or Regulatory Body Links (type and dates)	
Highest award title	BSc (Hons) Integrated Wildlife Conservation
Default award title	
Interim award titles	Not applicable
UWE progression route **Mode(s) of delivery**	Full/Part time
Codes **UCAS code**	**JACS code** CD34
ISIS code	**HESA code** 50:50 weighting between C300 (Zoology) and D447 (Environmental Conservation)
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 2012

Original Validation Date: May 2009

Latest Committee Approval: Quality and Standard Committee
Date: 2008/09
Version Code 1

Section 2: Educational aims of the programme

Context

The BSc (Hons) Integrated Wildlife Conservation programme is a one year full-time (or 2-3 years part-time) follow-on programme designed specifically as a progression route for students who successfully complete the Foundation degree in Integrated Wildlife Conservation, and who wish to continue their studies to honours degree level.

The programme aims to develop in students an in-depth understanding of the relationships between human beings and the natural world, and an appreciation of the practical steps that can be taken to ameliorate any resulting harm. In particular, it aims to build on students existing knowledge and skills in integrated wildlife conservation, and help them develop a more critical knowledge of the subject area, along with an enhanced experience, and the advanced subject-specific and generic skills required for further study or a career in wildlife conservation.

General Aims

The programme enables 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 graduates for gaining employment and being successful at work, or for further study;
- become self-critical and independent learners who value themselves and others as constructors of knowledge and its exchange.

Specific Aims

The specific aims of the programme are to:

- provide the education and resource environment which will enable students with an advanced 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 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 advanced 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 expert speakers. In particular, the programme develops a specialised and in-depth understanding of the subject area through modules that target specific ecological and conservation issues, such as Estuarine and Marine Ecosystems, Tropical Forests and Coral Reefs, Environmental Toxicology and Applied Conservation Biology. Additional underpinning of the subject is available through a choice of level 2 modules In Applied Ecology or Climate Change. The development of a range of communication skills (Outcome 10) is encouraged across all modules, but addressed specifically in the module Controversial Science and Society, in which students investigate the interface between scientists and society, as well as developing as more effective communicators. In addition, all outcomes are addressed explicitly in the 40-credit project module, which also serves as a vehicle for the delivery of the university's Graduate Development Programme (GDP) at level 3, and hence includes some consideration of, and preparation for, the world of work (outcome 12). The Learning Outcomes are fully supported by the general library facilities, specialist library facilities, reading packs and relevant software packages supplied via the Environmental Project Room and Field Studies Resource Room, and through UWE online (Blackboard). 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. **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, problem-based learning, data analysis, presentations, 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. The research project further develops these intellectual skills on an individual basis. **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. The research project allows the assessment of the full range of intellectual skills at an advanced level.

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 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. obtain, record, collate and analyse data using appropriate techniques in the field and laboratory, 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.	Skills 1-10 are developed throughout the programme. In particular, skills 4, 5, 6, 7, 8 and 9 are developed during laboratory and fieldwork practical sessions across modules, especially during the research project. Students are encouraged to debate and discuss key themes in wildlife conservation in all modules, and their communication skills are developed further through the Controversial Science and Society module. Similarly, students are encouraged to think independently and develop their problem-solving skills (skill 6) across all modules. **Assessment** Skills 1, 2, 3 and 10 are assessed in all written coursework, including essays, laboratory and fieldwork reports. Skills 4, 5, 6, 7, 8 and 9 are assessed through projects, laboratory and field-based work especially in the research project.

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 project, but also through the practical work in all modules. Team-working skills (skills 5, 6, and 7) are developed in project and field work, particularly in modules such as Tropical Forests and Coral Reefs, where students are required to work together in challenging environments. Skills for independent and life-long learning (skills 8, 9, and 10) are addressed explicitly through the university's Graduate Development Programme (in the Project module at level 3), 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.

Section 4: Programme structure

ENTRY ↓

level 3

Compulsory modules	**Prerequisite requirements**
• USSJ73-40-3 Research Project	• Minimum credit/module requirements: 240
Core modules A choice of 4 modules from the following: *Level 3 modules* • USSJAR-20-3 Estuarine and Marine Ecosystems • USSJGC-20-3 Tropical Forests & Coral Reefs • USSJGB-20-3 Applied Conservation Biology • USSJAG-20-3 Environmental Toxicology • USSJGR-20-3 Controversial Science and Society *Level 2 modules (only one may be selected)* • USSJPK-20-2 Climate change; or • USSJ9R-20-2 Applied Ecology	**Awards:** • Target/highest: BSc (Hons) Integrated Wildlife Conservation • Default title N/A **Credit requirements** 120 credits with a minimum of 100 credits at level 3

Section 5: Entry requirements

- A Foundation degree in Integrated Wildlife Conservation.

Section 6: Assessment Regulations

University Academic Regulations and Procedures

Section 7: Student learning: distinctive features and support

Distinctive Features

The BSc (Hons) 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 complex scientific issues are communicated to the public in order to develop more effective communication strategies.

The programme has been specifically designed to compliment and extend the knowledge and learning that students will achieve on successful completion of the FdSc degree in Integrated Wildlife Conservation. In addition, it may provide a suitable route to BSc honours level for others with relevant qualifications and/or experience.

The programme consists predominantly of level 3 modules, although two level 2 modules are offered (Applied Ecology and Climate Change), where students may chose one but not both, to provide breadth to their educational experience. At level 3, the Research Project is a compulsory 40 credit module, where students have the opportunity to research in depth and present an area of their choice within the field of integrated wildlife conservation. The further development of students' generic skills, in line with the university's Graduate Development Programme (GDP), is embedded in this module, with particular emphasis on helping students prepare for the world of work. In addition, students chose four from a range of optional modules, which allow the students to develop advanced knowledge and skills in topics of particular interest to them. These optional modules are underpinned by staff research interests and enhanced by guest speakers who are experts in their subject areas. Fieldwork is of fundamental importance to the development of advanced skills and understanding in integrated wildlife conservation, and occurs across a range of modules, including half-day, whole day and residential visits. In particular, Estuarine and Marine Ecosystems, and Tropical Forests and Coral Reefs both include residential field trips, with the latter being based around a ~2 week visit to a remote tropical location. The costs associated with half and full-day trips are generally met by the Faculty, and most residential field trips are subsidised, although the costs of the tropical field trip must be met in full by participating students.

Student Support

This programme is one of a suite of environmental awards managed by UWE. 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 and UWE's on-line learning system Blackboard. 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, and further support is available through the Faculty's Student Advisor team, and the university's extensive network of support for both academically-related and other issues.

The university's library provides an extensive range of paper-based and on-line literature and other resources that support the programme. Additional material is held in the Environmental Project Room, a staffed resource facility the provides both access to a range

of specialist literature and IT support for the environmental subject area, and a place which students can use for small project or other group work. The Field Laboratory and supporting Field Studies Resource room provide further facilities to support student-centred work and are of particular value to students undertaking research projects which are field-based. Students have 24-hour access to computers and the university's computing helpdesk. The university's e-Learning resource Blackboard has been extensively developed to support teaching and learning for each module, and the community of students within the environmental subject area. It provides not only material that directly underpins students' subject-specific learning, but also access to guidance on a range of study skills, up-to-date information on job and volunteering opportunities, and a forum for discussion on a range of relevant topics. The Faculty has a range of well-equipped teaching rooms and laboratories and a wide range of specialist scientific equipment that is available for use by students during the study programme.

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, those that describe a higher education qualification at level 6: 'Bachelor's degree with honours'. Graduates of the award achieving an Honours classification will have developed an understanding of a complex body of knowledge related to integrated wildlife conservation, some of it at the current boundaries of the academic discipline. In addition, graduates will have developed analytical techniques, problem-solving skills and communication skills that can be applied to a range of employment opportunities.

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 studying the subject at a variety of levels from molecules to populations. Whilst students will be expected to have a firm foundation across the biological sciences on entry to this one year top-up programme, this theme is continued in within this programme, for example in the module Environmental Toxicology, where students consider the molecular and cellular processes that underpin the toxicity of pollutants to living organisms. The benchmark statement also underlines the importance of practical work in the study of the biosciences. Practical work is key to the development of students' knowledge and skills across the modules in the process, and in particular in the research project module, and in the Tropical Forests and Coral Reefs module, where a residential field trip forms the majority of the taught provision. This provides an exciting and challenging experience during which students have the opportunity to acquire a range of knowledge and skills outside those they could experience in temperate regions, and also to experience local culture, all within a framework which is facilitated by the involvement of local university staff and wildlife conservation experts.

The benchmarking 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 degree programme.

- *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 in the faculty are research active and consequently programme development, formal teaching and project work is underpinned and informed by current research. Thus all staff contributing to the award have an established record in supervising undergraduate research-based projects, and students may have the opportunity to carry out their projects working

alongside research staff at post-graduate and post-doctoral level. Furthermore, there is on-going and developing research in wildlife conservation which is encouraged and maintained by the Faculty Research Centres, notably the Centre for Research in Plant and Environmental Sciences (CRIPES).

- *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. Thus the programme has been designed to meet the future needs of the employment sector at home and aboard, by producing graduates who can combine their scientific knowledge and effective communication skills with an appreciation of the socio-economic, cultural and political barriers that prevent wildlife-friendly behaviours, to develop sustainable solutions to wildlife conflicts across the globe.

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.