Nottingham Trent University Course Specification

	Basic Course Information	
1.	Awarding Institution:	Nottingham Trent University
2.	School/Campus:	School of Animal, Rural and Environmental Sciences / Brackenhurst Campus
3.	Final Award, Course Title and Modes of Study:	BSc (Hons) Ecology and Conservation (Full-time and sandwich)
4.	Normal Duration:	FT 3 years and SW 4 years
5.	UCAS Code:	C18A; C18B

6. Overview and general educational aims of the course

BSc (Hons) Ecology & Conservation is part of a suite of conservation courses in the School of Animal Rural and Environmental Sciences.

This course focuses on ecological concepts, and the natural world and how we conserve it. It combines an opportunity to understand the many ecological processes that operate within the environment with the challenge of learning how to utilise or foster them for the purposes of human and environmental gain or conservation. The degree focuses on the technical and scientific skills and knowledge needed to understand environmental problems, the ecology of land uses and the conservation of organisms, including methods of ecological investigation and assessment of the social and economic issues which may underpin the problems. The subjects studied range from the management of habitats through to environmental impact assessment and local planning for sustainability.

By providing a strong emphasis on fieldwork and practical skills as part of the learning process, the course will attract students who want to study a scientific degree with a substantial element of application in the field of conservation.

The course has strong links with industry, with students having the opportunity to learn by interaction with those involved in related industries on a number of modules, representing a broad range of countryside-related industries, statutory bodies, environmental consultancies and the voluntary sector.

Work experience opportunities are an intrinsic part of our offer to students and form an important feature of the course. Students can choose from a Certificate in Professional Practice which is a short 6 week+ placement carried out at the end of their second year or the Diploma in Professional Practice which is a sandwich year course-relevant, work-based placement following successful completion of the second year (Level 5) of the course.

Students will gain benefit from the knowledge and outcomes of staff members undertaking research, and will be able to benefit from access to current research data for use as case studies and in practical field work exercises.

The course aims are to:

- foster and develop students' knowledge and understanding of issues within the fields of ecology and environmental conservation;
- develop the students' understanding and appreciation of habitat management principles, sustainable development, legislation and ethics in their application to managing environmental conservation issues;
- enable students to interpret and analyse information gathered through surveys

and data collection, in order to be effective in scientific research and the conservation of the environment;
- o encourage students to develop an innovative, creative and enterprising attitude to problem solving, to work with and appreciate complexity and change;
- o encourage students to develop the ability to conceptualise, and to generate policy and management initiatives in dealing with conservation challenges;
- o develop students' understanding and personal transferable skills set in time-management, risk-assessment, problem solving and project management including planning, execution and evaluation and a commitment to continuous learning, training and personal development within the community and workplace;
- o equip students with the skills and knowledge to make an effective contribution to their chosen career and to wider society.

There is the opportunity to study abroad for half a year during the second year, with exchange opportunities currently available with universities in Canada, Australia and across the European Union.

7. **Course outcomes**

Course outcomes describe what students should know and be able to do by the end of the course if students take advantage of the opportunities for learning that we provide.

Knowledge and understanding

By the end of the course students should be able to:

1. Demonstrate an understanding of ecological relationships between organisms and their environment and the processes which shape the natural world at different temporal and spatial scales. (**B**)

2. Evaluate how changes in the environment affect species and habitats and how human interactions with natural populations and ecosystems are altering ecological systems. (**B**)

3. Discuss and critically analyse the applied significance of species as resource providers, damage-causing or development-limiting organisms, or as conservation priorities, and the impacts of their harvest or management. (**B**)

B = QAA benchmark driven

Skills, qualities and attributes

By the end of the course students should be able to:

4. Demonstrate plant and animal identification skills, ecological survey and monitoring techniques and knowledge and practice of habitat management. (**B**)

5. Apply environmental conservation and ecological theory and concepts appropriately, objectively analyse arguments and apply reasoning to resolve land-use issues and scientific problems. (**B**)

6. Demonstrate scientific skills such as designing investigations, acquiring, interpreting and analysing information, and communicating ideas in means appropriate to the intended audience.

7. Take responsibility for and reflect upon learning whilst demonstrating motivation, intellectual curiosity, critical thinking, problem-solving and self-confidence.

8. Demonstrate the skills and confidence to make an effective contribution to chosen careers by planning work, managing time and working effectively and demonstrate

a capacity for leadership and the ability to work collaboratively.

B = QAA benchmark driven

8. Teaching and learning methods

The BSc (Hons) Ecology and Conservation course is delivered with a strong emphasis on an interdisciplinary approach. You will develop subject knowledge through participation in lectures supported by group work, seminars and practical work. A hands-on approach allows you to become involved in the subjects; discussion is encouraged and assessments are used to enable you to reflect on what you have learnt.

You will experience visits to sites and visits from external speakers to enhance your understanding of the modules. You will also be involved in in field work such as ecological surveys and habitat management, and this will improve "soft skills" commonly referred to as team working, communication and problem solving and broaden your practical experience.

A final year individual research project allows you to specialise in an area of ecology or conservation that particularly interests you. The research undertaken during the module could be valuable when looking for graduate employment and might be valuable to conservation organisations. The course emphasises independent learning and is structured to facilitate greater learner autonomy and self-directed learning by the final year. You are encouraged to read widely throughout the course to supplement and consolidate what is being taught.

Students will undertake some assessments such as practice reports, desktop studies and give seminar presentations which help develop their study and communication skills without contributing to the module grades.

Delivery of the course is enhanced by use of the Brackenhurst Estate as a teaching resource. The 200 hectares of land is managed by the School as a mixed farm and includes a range of semi-natural and manmade habitats, with important species of wildlife.

9. Assessment methods

A range of assessment methods has been selected to allow students to demonstrate their level of attainment appropriate to the learning outcomes. Methods include: a range of examination types (unseen, seen and open book); dissertation; individual and group projects; practical work in the field; essays; scientific reports; analysis and presentation of numerical and graphical information.

Knowledge acquisition at Levels 4 and 5 is assessed partly through examinations and class tests, but at each Level there is independent project work to encourage critical thought.

At Level 6 assessments involve a greater emphasis on independent research and critical evaluation in order to develop research proposals and management recommendations. These are used to develop skills and to differentiate between the levels of attainment of individual students.

The research and field work skills are assessed in each year of the course, with primary research at Level 4 during Ecological Census Techniques, then at Level 5 in Experimental Design and Analysis. The course ultimately increases the level of autonomy and difficulty leading to the research project at Level 6 in the form of the Dissertation.

10. Course structure and curriculum

This course has the format of a typical honours degree course. It takes three years to complete (if taken full-time) and leads to a Bachelor of Science degree with Honours. A part-time route is available which normally takes 5 years to complete. A sandwich course is also available allowing students the option to spend one year working in industry, taken between levels 5 and 6.

The following collection of modules has been devised to enable students to achieve the course outcomes. The curriculum map identifies how each module contributes to the course outcomes.

Level 4

Biodiversity Conservation	(20 credits)
Ecological Census Techniques	(20 credits)
Introduction to Animal Ecology	(20 credits)
Introduction to Plant Ecology	(20 credits)
Practical Conservation Skills	(20 credits)
Principles of Ecology	(20 credits)

Level 5

Applied Habitat Management	(20 credits)
Environmental Monitoring and GIS	(20 credits)
Experimental Design and Data Analysis	(20 credits)
Land Use Ecology	(20 credits)
Law and Policy	(20 credits)
Technical Skills	(20 credits)

Industrial Placement Option

36 weeks placement leading to *Placement Diploma in Professional Practice* taken between Level 5 and Level 6.

Level 6

Dissertation	(40 credits)
Ecosystem Ecology	(20 credits)
Introduction to Ecological Consultancy	(20 credits)

Optional modules to total 40 credit points

Choose ONE from the following:-

Either: Global Agriculture and Food Security	(20 credits)
Or: Marine and Freshwater Ecology	(20 credits)

AND Choose ONE from the following:-

Either: Africa Field Course	(20 credits)
Or: UK Field Course	(20 credits)

Sandwich Award

Students have the opportunity of taking a placement for one year between Levels 5 and 6 with relevant employers such as ecological consultancies and organisations engaged in environmental conservation. The placements focus on developing personal skills, professional competencies and technical skills and a deeper understanding of the sector of industry. Preparation for the placement will involve a short tutorial programme during the second year of study to identify desired outcomes from the placement year. Students who have returned from placements in the previous year will give short presentations on their experiences to other students during a showcase event. The

placement will comprise of on-the-job work-based learning supported by mentoring. Students will be expected to take responsibility for your learning, under the supervision of a dedicated placement tutor. During the placement, there may be opportunities to undertake work-based training events and we would encourage students to take advantage of these.

Students who undertake the sandwich placement will be eligible for a Placement Diploma in Professional Practice award if they:

a) satisfactorily complete at least 36 weeks of supervised work experience;
b) receive satisfactory reports from the placement tutor and/or workplace supervisor in respect of the competencies or learning outcomes or experience gained;
c) submit all required tasks for the award

Students who satisfactorily complete between 6 and 35 weeks of supervised work experience and who satisfy points b) and c) above will be eligible for a Placement Certificate in Professional Practice.

The award of Diploma in Professional Practice is Pass/Fail. Students must complete all three parts to be eligible for the award. These arrangements are consistent with the University's guidelines on the certification of placement activity.

11. Admission to the course

Entry requirements

For current information regarding all entry requirements for this course, please see the course information web page.

12. Support for learning

The academic year begins with a pre-teaching induction week (Welcome Week), which includes induction to the course at the start of the first year. This gives an overview of the way the course runs and includes introductions to IT and library resources and to the range of student support services. When fully enrolled, students will have electronic access to the University's Virtual Learning Environment (NOW), which gives access to comprehensive current information on both module support and University regulations. During the second half of Level 5 there will be information on the module options available to students progressing into the Final Year.

Students are able to seek academic support from both subject and personal tutors through electronic communication, which allows one to one contact between the students and tutors. Study skills are fully integrated into the tutorials at each level, but in addition ARES operates a Study Skills Support process for all students. The University Student Support Services offer extensive advice and guidance on a range of issues, e.g. financial problems, dyslexia and disability and personal problems. There is also a well-established student-to-student mentoring service available.

Student support is provided through the tutorial process for pastoral and academic support. The School has well established links with Student Support Services who have a centre based on the Brackenhurst campus. Additional learning support is provided for students with specific learning needs such as dyslexia. Effective links have also been established with the Widening Participation Scheme, particularly Study Skills Support for Level 4 students.

More information is provided at: http://www.ntu.ac.uk/student_services/

13. Graduate destinations/employability

Students will be encouraged to enhance their skills for employment by the use of Personal Development Planning and through the services of the dedicated Employability team. Support is given to enable students to access the online tools for this, both within the course and additionally to it.

Across the course students will engage in employability skills training through the work-related activities in teaching sessions, especially in modules such as Practical Conservation Skills, Land Use Ecology and Dissertation. Students are also encouraged to undertake the industrial placement opportunities between Levels 5 and 6, and to work in the industry during holidays and at weekends (either paid or voluntarily).

It is envisaged that career opportunities will be available with organisations such as ecological and environmental consultancies and land management advisory bodies, local authorities, government agencies (e.g. Environment Agency and Natural England), Wildlife Trusts and other environmental charities. Alternatively graduates could progress to postgraduate study in ecology or other related fields.

14. Course standards and quality

Course standards are monitored in a variety of ways:

- A Course Committee which includes membership from undergraduate students at all levels of study, monitors student feedback about the course and individual modules.
- Student evaluation of modules is sought through EvaSys module feedback questionnaires.
- Students will be provided with feedback for all assessed work.
- The course has an External Examiner from another UK HE institution who submits annual reports on standards and quality of the course.
- The Subject Benchmarks of the Quality Assurance Agency have been incorporated into the Course Learning Outcomes.
- The University is subjected to institutional audits by the Quality Assurance Agency.

15. Assessment regulations

This course is subject to the University's Common Assessment Regulations (located in Section 16 of the Quality Handbook). Any course specific assessment features are described below:

The final degree classification is determined by **either** the weighted arithmetic mean of the contributing grade points, or by the majority grade, whichever results in the higher outcome.
The majority grade is determined by establishing the highest degree classification at which more than half the qualifying credits have been achieved.

In this course the level 5 credits contribute to the final degree classification, the overall level 5 arithmetic mean will be used to represent the equivalent of 20 level 5 credit points in a total of 140 credits (this is what we mean by 'qualifying credits'). Therefore, for example, for a student's majority grade to be first class, they need to have been awarded first class grades in over 70 credits (from a total of 120 credits from level 6 and 20 credits from level 5).

16. Additional Information

Collaborative partner(s):	The course participates in the University's study abroad programme and students will be encouraged to participate.
Course referenced to national QAA Benchmark Statements:	Biosciences (2015)
Course recognised by:	
Date this course specification approved:	June 2019
Any additional information:	

Fieldwork

Residential fieldwork is an important part of studying Ecology related degrees and is reflected in the latest revision of the QAA benchmark statement for Biosciences (which encompasses degrees of Ecology). Opportunities for fieldwork are vital as they underpin some of the key outcomes of studying ecology and demonstrating an understanding of conservation in situ, and provide students with excellent opportunities beyond the classroom to demonstrate key learning outcomes from the course. Opportunities are given in variety of modules at all levels to carry out routine investigations using appropriate ecological methodologies and conservation skills, but also as a means to provide students with the ability to apply critical understanding of the methodologies taught elsewhere through lectures and seminar environments. Understanding of a sense of place, awareness of different environments, awareness of others and how they live and work are also qualities and attributes that can be learnt through field work, which enable students to be better placed in terms of employability and a provide a conduit for readiness to embark in a career in industry.

Residential fieldwork is often a memorable highlight of a student's university experience and such an opportunity is provided through this course. The University provides a substantial level of financial subsidy for fieldwork, but students are still required to make a small financial contribution towards the costs of any residential field courses.