1. **Title of the module**
   (XX300) Application of Conservation Biology Theory

2. **Division or partner institution which will be responsible for management of the module**
   Durrell Conservation Academy, Durrell Wildlife Conservation Trust, Jersey

3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
   Level 6

4. **The number of credits and the ECTS value which the module represents**
   30 credits (15 ECTS)

5. **Which term(s) the module is to be taught in (or other teaching pattern)**
   Autumn Term and Spring Term

6. **Prerequisite and co-requisite modules**
   (XX301) Transferrable Skills for Conservation Managers. Both modules are compulsory.

7. **The course(s) of study to which the module contributes**
   Graduate Certificate in Endangered Species Management

8. **The intended subject specific learning outcomes.**
   On successfully completing the module students will be able to:
   8.1 Explain the concepts of species conservation, biodiversity and ecosystems services, their values and the threats to them [A1];
   8.2 Describe the concept of extinction risk and how to measure it [A2];
   8.3 Identify the strengths and weaknesses of prioritisation and extinction risk tools (e.g. IUCN Red List) [A3];
   8.4 Explain the dynamics of small populations and their increased vulnerability to extinction processes [A4];
   8.5 Critically evaluate the merits of different conservation action and species recovery techniques, including ex-situ species management [A5, A6];
   8.6 Describe the application of captive management skills to assist in-situ recovery of threatened species [A6];
8.7 Explain the importance of population health management both in the wild and in captivity to species conservation goals [A7];
8.8 Identify the key factors in designing a conservation education programme with teaching methods appropriate to the target audience [A8];
8.9 Discuss the relationship between species conservation and human wellbeing, livelihoods and other aspects of community-based conservation [A8].

The numbers in square brackets after the outcomes correspond to stated course learning outcomes (see Course Specification).

9. **The intended generic learning outcomes.**
   **On successfully completing the module students will be able to:**

9.1 Synthesise information from various written and spoken sources to gain a coherent understanding of conservation biology theory and practice [B1];
9.2 Adopt a holistic approach to problem-solving considering the different cultural, spiritual, scientific and experiential viewpoints of other students [B2];
9.3 Describe best practice in animal husbandry (e.g. nutrition, health, welfare, reproduction) [C1];
9.4 Demonstrate population monitoring skills (e.g. survey design, minimising bias, sampling methods, survey techniques) [C2].

The numbers in square brackets after the outcomes correspond to stated course learning outcomes (see Course Specification).

10. **A synopsis of the curriculum**

   As the world’s biodiversity comes under ever-increasing threat from the drive for human development there is a need for greater efficiency and effectiveness of conservation action, in particular at the species level which is currently our best known unit of measurement. It is crucial that conservation managers, in particular in the biodiversity-rich countries of the world, have a sound understanding of biological diversity and particularly of species in order to prioritise, plan and act in a way that makes best use of limited resources.

   This module is designed to bed a practical understanding of species conservation in the principal theories of conservation biology, beginning with a critical exploration of the current state of the world’s biodiversity - its distribution, abundance and demise as we know it - and the main threats that it faces. The importance of extinction as a natural process will be distinguished from the current perceived elevated rate of species loss over “background” rates. The introduction to small population biology theory and its relevance to species conservation will then outline the vulnerable status of many wild populations today and will highlight the risks of complacency over species that have been reduced to small and fragmented pockets. We cannot save all species at once; prioritisation tools (e.g. Hotspots, EDGE, and the IUCN Red List) will be demonstrated and practiced to
develop the skill of applying these systems and to introduce some of the limitations imposed by any selection procedure.

Once selected for action the conservation of a species requires planning - what strategy to adopt? What are the potential actions involved? How much will it cost? And how long will it take? In this module, students will be encouraged to critically review the planning process for species conservation, with particular emphasis on the value of diagnosing the main threats before identifying the best course of action. Through case study analysis students will consider the extended lengths of time required to save many species that have been (or are being) saved today and to discuss whether there is any scope for improvement. By tapping into the proven expertise of Durrell Wildlife Conservation Trust and the numerous case studies of species conservation attached to it, this module will explore a range of direct techniques for species conservation both in captivity and at the interface with the wild to demonstrate the direct actions that can be applied to manage species recovery in the wild.

Students will evaluate the level of success of such direct actions and the more indirect approach of involving local communities in conservation education and action to turn threatened species around. Discussions and case study analyses of such actions will be enriched by first-hand experience on Durrell’s animal and education departments and fieldtrips to visit local conservation initiatives, providing a holistic exposure to the realities of species conservation both in captivity and in the wild.

11. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**


12. **Learning and teaching methods**

   Total contact hours: 230 hours

   Total private study hours: 70 hours

   Total module study hours: 300 hours (30 credits)
13. **Assessment methods**

13.1 Main assessment methods

Written examination (2hrs) – 50%
- A written exam at the end of the module consisting of multiple choice and short answer questions

Written assignments (approximately 1000 words each) – 3 assignments, each contributing 15%
- Three written assignments submitted at intervals through the module, varying in format (e.g. essay-style answer, critical review of a scientific paper, synthesis of a scientific paper into a non-technical summary etc.)

Skills Development Task written report (approximately 400 words) – 5%
- A short written report detailing what the student did for their bespoke Skills Development Task, and what they gained from it

13.2 Reassessment methods

As per standard University rules.

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

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15. **Inclusive module design**

The Collaborative Partner (Durrell Wildlife Conservation Trust) recognises and has embedded the expectations of current equality legislation, by ensuring that the module is
as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum
b) Learning, teaching and assessment methods

16. Campus(es) or centre(s) where module will be delivered
Durrell Conservation Academy, Durrell Wildlife Conservation Trust, Jersey

17. Internationalisation
This module, and the course of which it is a component, is fully internationalised. It is specifically designed for an international audience and covers global conservation issues, looking at global conservation problems and drawing upon case studies from around the world. The module (and course) is delivered by Durrell Wildlife Conservation Trust, which has extensive experience of working in many different countries around the world. Staff delivering the teaching also have extensive experience of working around the world. Discussions and group work within the course also draw upon the students’ own experiences from their own countries. Assessment methods are tailored, where possible, to reflect tasks and skills which have ‘real-life’ application in the countries where our students come from. Once students return home to their own countries, we continue to offer them support through our graduate network.

If the module is part of a course in a Partner College or Validated Institution, please complete sections 18 and 19. If the module is not part of a course in a Partner College or Validated Institution these sections can be deleted.

18. Validated Institution
Durrell Wildlife Conservation Trust, Jersey

19. University Division responsible for the course
School of Anthropology and Conservation, Division of Social Sciences
FACULTIES SUPPORT OFFICE USE ONLY

Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.

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Module Specification Template with Guidance (last revised September 2020)