



**CORPORATE AND ACADEMIC SERVICES**

**MODULE SPECIFICATION**

| Part 1: Basic Data         |  |                           |                                  |             |     |
|----------------------------|--|---------------------------|----------------------------------|-------------|-----|
| Module Title               | Advanced Species Conservation in Practice      |                           |                                  |             |     |
| Module Code                | USSKDE-30-M                                    | Level                     | 7                                | Version     | 1.1 |
| UWE Credit Rating          | 30   | ECTS Credit Rating        | 15                               | WBL module? | No  |
| Owning Faculty             | Health and Applied Sciences                    | Field                     | Environmental                    |             |     |
| Department                 | Biological, Biomedical and Analytical Sciences | Module Type               | Standard                         |             |     |
| Contributes towards        | MSc Advanced Wildlife Conservation in Practice |                           |                                  |             |     |
| Pre-requisites             | None   | Co- requisites            | None                             |             |     |
| Excluded Combinations      | None   | Module Entry requirements | If offered as CPD or stand alone |             |     |
| First CAP Approval Date    | 2 June 2015                                    | Valid from                | January 2016                     |             |     |
| Revision CAP Approval Date |  | Revised with effect from  |                                  |             |     |

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| <b>Review Date</b> | January 2021 |
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| Part 2: Learning and Teaching |   |
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| Learning Outcomes             | <p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate a comprehensive understanding of current concepts and developments within the field of applied species conservation (assessed in component A and B)</li> <li>• Critically discuss the fundamentals of conservation genetics, in-situ and ex-situ species management strategies and their appropriate use in the development and implementation of conservation strategies in complex, real-world scenarios (assessed in component A &amp; B)</li> <li>• Demonstrate a clear and in-depth understanding of a wide range of conservation techniques including innovative methods for studying biodiversity; record scientific data and apply statistical analyses, interpret and present clearly your research findings (assessed in component B)</li> <li>• Critically evaluate appropriate strategies for conserving biodiversity, develop career skills (e.g. design a species action plan) and construct reasoned argument based on the evaluation of current research (assessed in component A)</li> </ul> |
| Syllabus Outline              | This module is designed to introduce the students to the field of species conservation.   |

|               |   |
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|               | <ol style="list-style-type: none"> <li>1) Introduction to species concept and taxonomic classification</li> <li>2) In-situ species management strategies<br/>Biodiversity threats and conservation strategies, Population dynamics, Surveying techniques</li> <li>3) Ex-situ species management strategies<br/>Institutional &amp; regional collection planning, Captive breeding, Husbandry, Enrichment, Health &amp; Nutrition, Reintroduction, Zoo record keeping system</li> <li>4) Prioritisation of target species and actions<br/>International Species Conservation Planning, Key species, Action plans, IUCN specialist group</li> <li>5) Genetics technics applied to conservation<br/>Inbreeding depression, loss of gene flow, genetic drift, genetic aspects of captive breeding, forensics, non-invasive sampling techniques (e.g. sequencing analysis)</li> <li>6) Legislation &amp; governance<br/>Law enforcement, International convention &amp; organisations (e.g. CBD, CITES, RAMSAR, UNF CCC, Wildlife trade)</li> <li>7) Diseases in natural populations<br/>Zoonosis, Host species</li> <li>8) Invasive species</li> </ol>  |
| Contact Hours | <p>The aim of this module is to provide a platform for students to gain an in-depth and advanced understanding of species conservation in practice.</p> <p>In order to achieve this aim the module uses a variety of teaching and learning methods and approaches, including face-to-face contact, independent learning, and distance learning that is facilitated through remote contact.</p> <p>Students will spend 60 hours in face-to-face contact, which is organised into 2 teaching blocks of 3-4 days per block. These direct contact hours will focus on the development of practical skills and analysis of real-world scenarios, and will offer opportunities for one-to-one and small group sessions with tutors to explore students' learning development, and enhance cohort identity. Group work and learning will be enhanced by the use of 'twilight' tasks, where students are given topics to research in their 'free' time within the teaching block, which they can then report on in a plenary session as the end of each teaching block.</p> <p>The majority of the theoretical component of the module will be presented through distance learning, through the delivery of lectures online, and will involve a number of technological enhancements. The learning of lecture content will be reinforced through time spent in independent learning by the directed reading of recommended texts and through the use of technology enhanced learning resources that will be provided online. This online learning and engagement will be delivered through several avenues:</p> <ul style="list-style-type: none"> <li>• Synchronous online tutorials where the students will contribute to online activities that are facilitated by an academic;</li> <li>• Asynchronous discussions in the student's own time where they will engage/collaborate with other students on the course or in specified groups, and in which the academic is permitted to moderate where necessary, but is not expected to contribute.</li> <li>• Synchronous surgery sessions timetabled for a specific time in which the academic will be available online to answer live questions via discussion boards/blogs/collaborate or to respond to questions posted/asked prior to the</li> </ul> |

- session.
- Interactive, online formative quizzes.

This formalised on-line contact will contribute a total of 12 hours toward the student's total contact time.

The remaining 228 hours will be spent in independent learning, and in particular on the planning, implementation, analysis and reporting of the Management Plan tasks that form the summative assessment for the module.

Teaching and Learning Methods

The module contact time is delivered predominantly at Bristol Zoological Gardens and makes extensive use of Bristol Zoo's expertise in conservation, as well as its large collection of captive wildlife. It is able to draw on the Zoo's wide experience of both ex-situ and in-situ conservation programme around the world, especially in Madagascar and Cameroon, to provide real-world case studies to support student learning.

**Scheduled learning** includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.

**Independent learning** includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.

Key Information Sets Information

Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which a requirement is set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.

| <b>Key Information Set - Module data</b> |   |                         |                       |                 |
|--|---|-------------------------|-----------------------|-----------------|
| <i>Number of credits for this module</i> |   |                         |                       | 30              |
| Hours to be allocated                    | Scheduled learning and teaching study hours | Independent study hours | Placement study hours | Allocated Hours |
| 300                                      | 72  | 228                     | 0                     | 300             |

The table below indicates as a percentage the total assessment of the module which constitutes a -

**Written Exam:** Unseen written exam, open book written **exam**, **In-class test**

**Coursework:** Written assignment or essay, **report**, dissertation, portfolio, **project**

**Practical Exam: Oral Assessment and/or presentation**, practical skills assessment, practical exam

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

|                                      |  |      |  |
|--------------------------------------|--|------|--|
| Total assessment of the module:      |  |      |  |
| Written exam assessment percentage   |  | 0%   |  |
| Coursework assessment percentage     |  | 50%  |  |
| Practical exam assessment percentage |  | 50%  |  |
|                                      |  | 100% |  |

Student learning will be supported through the University's E-Learning environment, Blackboard. Copies of recommended textbooks are available in the library and online. Students will be encouraged to read original literature (peer-reviewed scientific papers) during the course of the module. Some papers will be discussed with the students during the lecture.

**Core readings**

Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be required to purchase a set text, be given a print study pack or be referred to texts that are available electronically or in the Library. Module guides will also reflect the range of reading to be carried out.

**Further readings**

Further reading will be required to supplement the set text and other printed readings. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be required to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be accessed remotely. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from the academic literature.

**Access and skills**

The development of literature searching skills is supported by a Library seminar provided within the first semester. Students will be presented with further opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively. Additional support is available through the Library Services web pages, including interactive tutorials on finding books and journals, evaluating information and referencing. Sign up workshops are also offered by the Library.

**Indicative Reading List**

The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, current advice on readings will be available via the module guide.

The most recent edition of the following texts:

Sinclair, A.R.E., Fryxell, J.M. & Caughley, G. (2006) *Wildlife ecology, conservation and management*. Blackwell Science, Oxford.

Caughley, G. & Gunn, A. (1995) *Conservation biology in theory and practice*. Blackwell Science, Oxford.

Oates, J.F. (1999) *Myth and reality in the rain forest: How conservation strategies are failing in West Africa*. Univ of California Press.

IUCN/SSC (2008) *Strategic Planning for Species Conservation: A Handbook*. Version 1.0. Gland, Switzerland: IUCN Species Survival Commission. 104pp.

Schwitzer, C., Mittermeier, R.A., Davies, N., Johnson, S., Ratsimbazafy, J., Razafindramanana, J., Louis, Jr. E.E., Rajaobelina, S. (eds). (2013) *Lemurs of Madagascar: A Strategy for Their Conservation 2013–2016*. Bristol, UK: IUCN SSC Primate Specialist Group, Bristol Conservation and Science Foundation, and Conservation International.

Maldonado, O., Aveling, C., Cox, D., Nixon, S., Nishuli, R., Merlo, D., Pinteá, L. & Williamson, E.A. (2012) *Grauer's Gorillas and Chimpanzees in Eastern Democratic Republic of Congo (Kahuzi-Biega, Maiko, Tayna and Itombwe Landscape): Conservation Action Plan 2012–2022*. Gland, Switzerland: IUCN/SSC Primate Specialist Group, Ministry of Environment, Nature Conservation & Tourism, Institut Congolais pour la Conservation de la Nature & the Jane Goodall Institute. 66pp.

IUCN. (2013) Documentation standards and consistency checks for IUCN Red List assessments and species accounts. Version 2. Adopted by the IUCN Red List Committee and IUCN SSC Steering Committee. Downloadable from: [http://www.iucnredlist.org/documents/RL\\_Standards\\_Consistency.pdf](http://www.iucnredlist.org/documents/RL_Standards_Consistency.pdf)

WAZA. (2005) *Building a Future for Wildlife - The World Zoo and Aquarium Conservation Strategy*.

Scientific journals including:

- Conservation Biology
- Biological Conservation
- Oryx
- Journal for Nature Conservation
- Environmental Conservation
- Frontiers in Ecology and the Environment

### Part 3: Assessment

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| Assessment Strategy | <p>The assessment strategy has been designed to take full advantage of the facilities offered by Bristol Zoo for studying Advanced Species Conservation in Practice, whilst ensuring that the module learning outcomes are attained.</p> <p><b>Component A: Oral Presentation (50%)</b><br/>         The oral presentation explores the student's ability to apply the theoretical concepts learned during the course into a real-world scenario. For instance, the students will be organized in pairs and hours during the teaching block will be assigned for group research and a team working exercise. The students will design and present a species conservation programme or a species management plan. A range of countries or species, as well as main actors will be specified. The oral presentation lasting 15 minutes with 5 minutes for questions to test specific learning outcomes if necessary.</p> <p><b>Component B: Systematic Review (50%)</b><br/>         An extended piece of research into the methods used and impacts of conservation of a particular taxonomic group. The work comprises a literature review, data collation combined with the appropriate meta-analysis, presentation and interpretation of the data and its evaluation in the context of the published literature. It is an extended piece of work designed to test the research, analysis and critical appraisal skills expected of a Masters student. Word limit: 3,000 words.</p> |
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|   |           |           |  |
|---|-----------|-----------|--|
| Identify final assessment component and element | <b>A</b>  |           |  |
|   | <b>A:</b> | <b>B:</b> |  |

|  |  |            |
|--|--|------------|
|  | <b>50%</b>   | <b>50%</b> |
| <b>First Sit</b>   |  |            |
| <b>Component A (controlled conditions)</b><br><b>Description of each element</b> | <b>Element weighting</b><br><b>(as % of component)</b> |            |
| 1. Oral Assessment and/or Presentation (20 minutes)                              | 100%   |            |
| <b>Component B</b><br><b>Description of each element</b>                         | <b>Element weighting</b><br><b>(as % of component)</b> |            |
| 1. Systematic Review (3000 words)  | 100%   |            |

|  |  |  |
|--|--|--|
| <b>Resit (further attendance at taught classes is not required)</b>  |  |  |
| <b>Component A (controlled conditions)</b><br><b>Description of each element</b>   | <b>Element weighting</b><br><b>(as % of component)</b> |  |
| 1. Oral Assessment and/or Presentation (20 minutes)  | 100%   |  |
| <b>Component B</b><br><b>Description of each element</b>   | <b>Element weighting</b><br><b>(as % of component)</b> |  |
| 1. Systematic Review (3000 words)  | 100%   |  |
| If a student is permitted a retake of the module under the University Regulations and Procedures, the assessment will be that indicated by the Module Description at the time that retake commences. |  |  |