1. **Title of the module**

WCON5390 (DI539) Applied Ecology and Conservation

1. **Division or partner institution which will be responsible for management of the module**

Human and Social Sciences

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

Level 5

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn or Spring

1. **Prerequisite and co-requisite modules**

Pre-requisite: DI311 Principles in Biogeography and Ecology, or at the discretion of the module convenor.

1. **The course(s) of study to which the module contributes**

Optional to: BSc Wildlife Conservation\*

BSc Bioscience\* (see Division of Natural Sciences)

BSc Human Geography\*

BSc Anthropology\*

\*Inc. cognate courses

Available as an elective module. Not available to Short Term Credit Students

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

8.1 Gain in-depth knowledge of the ecological processes that define disturbed and undisturbed terrestrial ecosystems

8.2 Apply principles of population ecology and community ecology theory to inform ecological management decisions in a range of contexts (e.g. agriculture, forestry)

8.3 Demonstrate an understanding of key processes that underpin population biology, (e.g. population growth, density-dependent and density-independent factors), and apply this to challenges in animal population management

8.4 Appreciate how ecological theory can inform conservation practice, and better understand the threats to biodiversity from habitat loss, invasive species, and climate change

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

9.1 Make effective use of information sources

9.2 Communicate succinctly the subject matter of practical tasks.

9.3 Understand and explain the theoretical, technical or applied dimensions of a problem.

9.4 Work independently, manage their own learning and development, including time management and organisational skills.

1. **A synopsis of the curriculum**

This module explores the ways in which ecological science can be applied to solving some of the crucial problems facing the world today, including those affecting wildlife conservation. It covers key ecological principles at the population, community and ecosystem levels, and investigates how these principles can help guide management decisions, policy and environmental practice. A major theme is how natural resources can be managed and exploited sustainably, drawing on examples from agriculture, urbanisation, and forestry in temperate and tropical regions. Central to the module is the question of how wildlife conservation can be better incorporated into the wider needs of environmental management.

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

Begon, M, Howarth, R, & Townsend, C.R (2006) Ecology: from individuals to ecosystems. John Wiley & Sons

Ghazoul, J., and Sheil, D. 2010 Tropical rain forest ecology, diversity, and conservation. Oxford University Press.

Howell, E (2012) Introduction to restoration ecology. Island Press

Rockwood, L (2015) Introduction to Population Ecology. Blackwell

Sinclair, ARE (2006) Wildlife ecology, conservation, and management. Blackwell.

Verdade, LM, Piña, CI, & Lyra-Jorge, MC (eds) 2014, Applied Ecology and Human Dimensions in Biological Conservation, Springer

1. **Learning and teaching methods**

Total contact hours 24

Total private study hours 126

Total module study hours 150

1. **Assessment methods**
   1. Main assessment methods

Critical Writing Assignment (2,500 words) 50%

Field report (2,500 words) 50%

13.2 Reassessment methods

Reassessment instrument: 100% Coursework

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 9.1 | 9.2 | 9.3 | 9.4 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |
| *Private Study* | X | X | X | X | X | X | X | X |
| *Lectures/practical activity* | X | X | X | X | X | X | X |  |
| **Assessment method** |  |  |  |  |  |  |  |  |
| *Critical writing assignment* | X | X | X | X | X | X | X | X |
| *Field report* | X | X | X | X | X | X | X | X |

1. **Inclusive module design**

The Division 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

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

The module covers applied ecology of a range of ecosystems worldwide and the threats facing them. The module is a pre-requisite for DI535 tropical ecology that is taught exclusively at a field site in Borneo. The subject content and module activities concern temperate and tropical countries.

**DIVISIONAL 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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| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
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