COURSE SPECIFICATION DOCUMENT

Academic School / Department:	Science, Innovation & Technology
Programme:	Liberal Arts
***FHEQ* Level:**	4
Course Title:	Ecology and Conservation
Course Code:	ENVR 4102
Total Hours:	160 (Lev 3-5) (4 US Credit)
Timetabled Hours:	45
Guided Learning Hours:	15
Independent Learning Hours:	100
Credit	16 UK CATS credits 8 ECTS credits 4 US credits

Course Description:

This course provides an examination of the principles of ecology and their application to conservation. Students will explore the complex relationships between organisms and their environments, including population dynamics, species interactions, ecosystems, biodiversity, and natural/anthropogenic causes of species' decline and extinction. The course covers key topics such as habitat destruction, climate change, invasive species, and conservation strategies at local, regional, and global scales. Special emphasis is placed on understanding and addressing the threats to biodiversity and developing practical solutions for conservation. Through case studies students will gain the skills necessary to critically evaluate conservation challenges and design effective conservation strategies.

Prerequisites:

None

Aims and Objectives:

This course aims to expose students to an understanding of the natural and physical world around us through the principles of ecology and the properties of ecosystems, including the evaluation and interpretation of ecological/conservation data. In addition, the course aims to introduce students to the history and science of conservation and the importance of biodiversity. A key theme is the environmental concept of 'interrelatedness'.

Programme Outcomes:

AI, BI, CI, DI

A detailed list of the programme outcomes are found in the Programme Specification. This is located at the archive maintained by Registry and found at:
https://www.richmond.ac.uk/programme-and-course-specifications/

Learning Outcomes:

By the end of this course, successful students should be able to:

- Demonstrate knowledge and understanding of the scientific concepts and principles of ecology and biodiversity within an environmental and ecosystem context.
- Demonstrate knowledge and understanding of the history of conservation.
- Demonstrate knowledge and understanding of the scientific principles that underpin conservation.
- Evaluate and interpret ecological/conservation data, and population dynamics.

Indicative Content:

- The principles and science of ecology from an ecosystem and environmental perspective, including relevant terminology
- Threats to ecosystems, such as habitat destruction, climate change, invasive species
- The environmental concept of 'interrelatedness'
- Principles of biodiversity
- History of conservation
- Conservation science
- Population dynamics
- Quantitative and qualitative analysis of ecological and/or conservation data

Assessment:

This course conforms to the University Assessment Norms approved at Academic Board and located at: https://www.richmond.ac.uk/university-policies/

Teaching Methodology:

This course will be delivered face to face through a combination of lectures and interactive sessions. In addition to classroom activities, there are guided learning elements that are tutor led and arranged through Blackboard. These activities can be asynchronous online sessions, flipped classrooms, set readings with discussion boards or set guest lectures for example. Set activities are monitored by the instructor to ascertain student engagement. Students are encouraged to prepare for class and to play an active part, to raise questions, following-up ideas and interact with a wide range of provided material.

Indicative Text(s):

Begon, M., Townsend, C.R. and Harper, J.L. (2020) *Ecology: From Individuals to Ecosystems*. 5th edn. Oxford: Wiley-Blackwell.

Dickinson, G. and Murphy, K. (2007) *Ecosystems*. 2nd edn. London: Routledge.

Primack, R.B. (2014) *Essentials of Conservation Biology*. 6th edn. Sunderland, MA: Sinauer Associates.

Sodhi, N.S. and Ehrlich, P.R. (eds.) (2010) *Conservation Biology for All*. Oxford: Oxford University Press.

Journals

Discover Life. Available at: https://link.springer.com/journal/11084?gad_source=1&gclid=EAIaIQobChMIpNuHrOXgiAMVkBkGAB2pbzAfEAAYASAAEgK2p_D_BwE

Journal of Wildlife Management.

Science of the Total Environment.

Websites

The British Ecological Society. Available at: https://www.britishecologicalsociety.org/ (Accessed: November 2024).

Conservation International. Available at: https://www.conservation.org/ (Accessed: November 2024).

The Iucn Red List of Threatened Species. Available at: https://www.iucnredlist.org/ (Accessed: November 2024).

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: https://www.cites.org/ (Accessed: November 2024).

See syllabus for complete reading list.

Change Log for this CSD:

Nature of Change	Date Approved & Approval Body (School or AB)	Change Actioned by Registry Services
First edition	Nov 2024	