HARTPURY
UNIVERSITY CENTRE

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Behavioural and Evolutionary Ecology					
Module Code	UINXSR-30-2		Level	2	Version	1.2
Owning Faculty	Hartpury		Field	Animal and Land Science		
Contributes towards	BSc (Hons) Animal Behaviour and Welfare FdSc Animal Behaviour and Welfare MSci Animal Behaviour and Welfare					
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard	
Pre-requisites	Animal Behaviour (UINXNS-30-1)		Co-requisites	None		
Excluded Combinations	None		Module Entry requirements	None		
Valid From	V1.0 01 September 2014 V1.1 01 September 2016 V1.2 01 September 2017		Valid to	01 September 2020		

CAC Approval Date	V1.0 29 May 2014 V1.1 02 February 2016 V1.2 28 March 2017

Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: 1 Explain the adaptation of animals to their environment using behavioural and evolutionary principles (A, B). 2 Appraise behavioural adaptations in relation to interactions with the environment, conspecifics and other species (A, B). 3 Evaluate the role of environmental and social factors in influencing behavioural responses (A, B). 4 Analyse the adaptive function of reproductive, social and foraging strategies (A, B). 5 Evaluate the adaptive function of the behavioural responses of a chosen species to stimuli (B). 6 Interpret quantitative data and make effective use of information derived from a number of sources (B).
Syllabus Outline	• Evolution and natural selection. • Evolutionary stable strategies and life history strategies. • Environmental interactions: biological rhythms, migration, hibernation and torpor. • Reproductive strategies: mating systems, sexual selection, sexual conflict, sperm competition, cryptic female choice, and parental investment. • Social strategies: communication, learning, altruism, eusociality, group living, territoriality, mutualism. • Foraging strategies: optimal foraging, ideal free distribution, ideal despotic distribution, predator-prey interactions. • Application of behavioural ecology: conservation, human-animal interactions, human system.

Teaching and Learning Methods	***Scheduled learning*** May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop. ***Independent learning*** May include hours engaged with essential reading, case study and/or seminar preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. This will involve the preparation and writing of an assignment and practical report, revision for the examination and further reading to support formal teaching. ***Virtual learning environment (VLE) (or equivalent)*** This module is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE (or equivalent).
Key Information Sets Information	Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement 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. **Key information set – module data** Number of credits for this module: 30 Hours to be allocated: 300 | Scheduled learning and teaching study hours: 72 | Independent study hours: 228 | Placement study hours: 0 | Allocated Hours: 300 The table below indicates as a percentage the total assessment of the module which constitutes: 1 *Written Exam:* Unseen written exam, open book written exam, in-class test. 2 *Coursework:* Written assignment or essay, report, dissertation, portfolio, project. 3 *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: 30% Coursework assessment percentage: 70% Practical exam assessment percentage: 0% 100%

Reading Strategy	***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*** Formal opportunities for students to develop their library and information skills are provided within the induction period and study skills sessions. Additional support is available through online resources. This includes interactive tutorials on finding books and journals, evaluation information and referencing. Sign up workshops are also offered.
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 other more frequently updated mechanisms, including the module guide. Alcock, J. (Current Edition) *Animal Behavior: An Evolutionary Approach*. Massachusetts: Sinauer Associates. Barnard, C. (Current Edition) *Animal Behaviour: Mechanism, Development, Ecology and Evolution*. Harlow: Prentice Hall. Danchin, E., Giraldeau, L.A. & Cézilly, F. (Current Edition) *Behavioural Ecology: An Evolutionary Perspective on Behaviour.* Oxford: Oxford University Press. Davies, N.B., Krebs, J.R., & West, S.A. (Current Edition) *An Introduction to Behavioural Ecology*. Oxford: Wiley-Blackwell. Krebs, J.R. & Davies N.B. (Current Edition) *Behavioural Ecology: An Evolutionary Perspective*. Oxford: Blackwell. Journals: Animal Behaviour. Ecology and Evolution. Evolution. Nature. Proceedings of the Royal Society of London. Trends in Ecology and Evolution.

Part 3: Assessment			
Assessment Strategy	The practical report requires students to collect data, analyse this and present it in an appropriate format. This will be a useful skill to these students now and in the future. It will also facilitate in depth utilisation of the challenging information and theories covered throughout the module. These theories will be explored within the written examination and through evaluation and discussion of evolutionary and behavioural principles within taught sessions, underpinned by additional reading. Understanding in this area will be developed through formative feedback and discussion. In line with the College's commitment to facilitating equal opportunities, a student may apply for alternative means of assessment if appropriate. Each application will be considered on an individual basis taking into account learning and assessment needs. For further information regarding this please refer to the VLE.		
Identify final assessment component and element	Written examination		
% weighting between components A and B (Standard modules only)		**A:**	**B:**
		30%	70%
First Sit			
Component A (controlled conditions) **Description of each element**		**Element weighting**	
1	Written examination (1 hour)	100%	
Component B **Description of each element**		**Element weighting**	
1	Practical Report (3,000 words)	100%	
Resit (further attendance at taught classes is not required)			
Component A (controlled conditions) **Description of each element**		**Element weighting**	
1	Written examination (1 hour)	100%	
Component B **Description of each element**		**Element weighting**	
1	Practical Report (3,000 words)	100%	
If a student is permitted an **EXCEPTIONAL RETAKE** of the module the assessment will be that indicated by the Module Description at the time that retake commences.			