



CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Tropical Expedition				
Module Code	USSK59-15-3	Level	3	Version	1.1
Owning Faculty	Health and Applied Sciences	Field	Biological, Biomedical and Analytical Sciences		
Department	Applied Sciences				
Contributes towards	BSc. Hons Wildlife Ecology and Conservation Science BSc. Hons Environmental Science BSc. Hons Biological Sciences BSc. Hons Integrated Wildlife Conservation				
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Professional Practice
Pre-requisites	USSK5C-30-1 Life on Earth or equivalent e.g USSJ99-20-1		Co- requisites		
Excluded Combinations			Module Entry requirements		
Valid From	September 2016		Valid to	September 2019	

<b>CAP Approval Date</b>	May 2016
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> <li>• undertake ecological field work in tropical ecosystems and describe the problems and limitations of working in tropical environments (assessed on Component A, B1, B2);</li> <li>• undertake and describe in detail, field surveys to assess the populations of tropical fauna and flora (assessed in Component A, B1, B2);</li> <li>• critically evaluate field survey techniques used in tropical environments (assessed in Component B1, B2);</li> <li>• discuss current theories of tropical ecosystem ecology (assessed in Component B1, B2);</li> <li>• demonstrate core transferable skills through team work, project management, time management, independent research and communication (assessed in Component B1, B2).</li> </ul>
Syllabus Outline	<p>This module examines the ecology of tropical ecosystems and the field and analytical methods used to survey and assess these ecosystems. When possible, students will have the choice of going either on an expedition to Cuba or to Madagascar. Students will attend workshops and tutorials relevant to their particular expedition.</p>

	<ul style="list-style-type: none"> <li>• Tropical weather patterns and the ecology and environments of tropical ecosystems.</li> <li>• Techniques in floristic identification, diversity and collection. Assessment of plant species distribution and abundance in the tropics. Introduction to forest gap dynamics.</li> <li>• Ecology of tropical populations of reptiles, birds, fish and mammals and the methods and techniques used to study them.</li> <li>• Techniques in faunistic identification, diversity and collection. Assessment of animal species distribution and abundance in the tropics. Factors affecting the diversity and distribution of tropical animals. Biological interactions and community structure. Symbiotic relationships.</li> <li>• Threats to tropical ecosystems and conservation measures. Examples may include coral reef conservation and reef health or conserving threatened primates or reptiles through tropical forest restoration.</li> </ul>
Contact Hours	<p>The module will be delivered primarily during a 2 week expedition either to the Isle of Youth, off the coast of mainland Cuba or to a forest field site in Madagascar. In the event of unforeseen circumstances, such as political instability, an alternative locations may be used.</p> <p>Preparation for the expedition will involve a series of workshops, tutorials and practical training at UWE. Sessions will be available during and after the expedition returns to co-ordinate and analyse data.</p> <p>5 workshops @ 2 hours/workshop = 10 hours  5 tutorials @ 2 hours/tutorial = 10 hours  Residential field course @ 6 hours/day = 84 hours</p>
Teaching and Learning Methods	<ul style="list-style-type: none"> <li>• In the forests of either Cuba or Madagascar, students will be trained in tropical plant identification and the techniques used to describe and map trees within standard areas. A variety of survey methods will be introduced and used to assess animal populations. Techniques may include mist netting of birds; transect techniques for reptiles, electronic monitoring of bat activity, tracking lemurs and species identification and insect identification and surveys. Additional lectures and practical training will be conducted in the evenings by UWE staff and staff from the University of Havana or by staff from the University of Antananarivo or from the conservation organisation Sadabe (Madagascar). These sessions will allow students to develop their taxonomic skills, discuss the day's activities, complete field notes and collate and analyse data.</li> <li>• All participants on the expedition to Cuba will be required to hold a PADI Open Water diving certificate, or an equivalent qualification, before leaving the UK. An appropriate training programme will be organised beforehand by the module team using qualified instructors. In Cuba, the field work programme will be divided into two discrete sections. Five days will be based in an area of dry deciduous tropical forest and five days will be based on diving on coral reefs. Students will be expected to become proficient in the identification of corals and coral reef fish and be able record data accurately and efficiently.</li> <li>• All participants on the expedition to Madagascar will be expected to familiarise themselves with the taxonomy and identification features of forest fauna and flora. Students will spend approximately 10 days at the forest field site and undertake a range of surveys to examine spatial and temporal differences in forest environments and the impact of restoration programmes. Students will actively engage in community based conservation projects and work alongside local students and researchers</li> </ul> <p>The cost of running the trip will be met by the students themselves. The Faculty will</p>

fund the cost of staff supervising and teaching during the expedition.

Key Information Sets Information

<b>Key Information Set - Module data</b>				
<i>Number of credits for this module</i>				
				15
Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours
150	104	46	0	150



Total assessment of the module:	
Practical assessment percentage	P/F
Coursework assessment percentage	100%
	100%

Reading Strategy

All students will be encouraged to make full use of the print and electronic resources available to them through membership of the University. These include a range of electronic journals and a wide variety of resources available through web sites and information gateways. The University Library's web pages provide access to subject relevant resources and services, and to the library catalogue. Many resources can be accessed remotely. Students will be presented with opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively.

This guidance will be available either in the module handbook, via the module information on Blackboard or through any other vehicle deemed appropriate by the module/programme leaders.

All students on the Cuba expedition will require their own personal copies of:

PADI (2010) *PADI Open Water Manual*. California: Rancho Santa Margarita.

Human, P. and DeLoach, N. (1995) *Snorkeling guide to marine life*. Jacksonville, Florida: New World Publications.

Indicative Reading List

**General indicative reading:** The most recent edition of

Sodhi, N.S., Brook, B.W. and Bradshaw, C.J.A. *Tropical conservation biology*. Oxford: Blackwell Publishing.

**Texts available for use in the field:**

Claro, R., Lindeman, K.C. and Parenti, L.R. (2002) *Ecology of the marine fishes of Cuba*. Washington and London: Smithsonian Institution Press.

Schettino, L.R. (1999) *The Iguanid lizards of Cuba*. Boca Raton: University Press of Florida.

Garbutt, N. (2007). *Mammals of Madagascar*. Yale University Press. New Haven. USA.

Sinclair, I & Langrand, O. (2004) *Birds of the Indian Ocean Islands: Madagascar, Mauritius, Réunion, Rodrigues, Seychelles and the Comoros*. Struik Publishers (Pty) Ltd

	<p><b>Students will be provided with access to relevant journal articles. Examples include:</b></p> <p>O'Donovan G. (1990) Vegetation patterns in the Dumoga Bone National Park, Sulawesi. In: <i>Insects and the Rain forests of S. E. Asia (Wallacea)</i>. Ch. 14. London: Royal Entomological Society, pp.129-143.</p> <p>Imbert, D. and Portecop, J. (2008) Hurricane disturbance and forest resilience: Assessing structural vs. functional changes in a Caribbean dry forest. <i>Forest Ecology and Management</i>. 225, pp. 3494-3501.</p> <p>Portillo-Quintero, C.A. and Sanchez-Azofeifa, G.A. (2010) Extent and conservation of tropical dry forests in the Americas. <i>Biological Conservation</i>. 143, pp.144-155.</p> <p>Mittermeier RA, Ganzhorn JU, Konstant WR, Glander K, Tattersall I, Groves CP, Rylands AB, Hapke A, Ratsimbazafy J, Mayor MI, Louis Jr EE, Rumpler Y, Schwitzer C, Rasoloarison RM. (2008). Lemur diversity in Madagascar. <i>International Journal of Primatology</i> 29, pp. 1607-1656.</p> <p>Mittermeier RA, Wallis J, Rylands AB, Ganzhorn JU, Oates JF, Williamson EA, Palacios E, Heymann EW, Kierulff MCM, Long Yongcheng, Supriatna J, Roos C, Walker S, Cortés-Ortiz L, Schwitzer C. 2009. Primates in Peril: The World's 25 Most Endangered Primates 2008–2010. <i>Primate Conservation</i> 24, pp. 1-57</p>
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<b>Part 3: Assessment</b>	
Assessment Strategy	<p>The Assessment Strategy has been designed to support and enhance the development of practical skills, whilst ensuring that the modules Learning Outcomes are attained. The focus is on assessments that link directly to employability skills as described below.</p> <ul style="list-style-type: none"> <li>• The aims of this module are to develop practical skills and knowledge of the techniques used to study tropical ecosystems. Component A therefore is based on achieving a satisfactory level of skill performing advanced field techniques and knowledge of organisms and identification skills. Both elements must be passed. To pass each element under component A students must achieve a competency mark of 60% or above.</li> <li>• The ability to record notes and collect accurate data in the field is assessed through the field log books and this make a significant contribution to Component B.</li> <li>• Taking part in a scientific expedition to the tropics provides students with a unique opportunity to work in a difficult environment with local experts. In these challenging conditions, students develop essential skills in endurance, tolerance, team working, organisation and time management. These are all key graduate skills. These skills are demonstrated through the production of a comprehensive field log book.</li> </ul> <p>The field logs will be completed by hand in the field due to the lack of power, internet, issues with bringing technology into either Cuba or Madagascar and the unreliability of technology in tropical conditions, particularly marine conditions. However, students will be provided with the opportunity to take photographs / film on land and under water and will be encouraged to use this to provide material for organisation like Education Through Expedition (ETE) an organisation affiliated to UWE to enhance their learning and personal development.</p> <p>Due to the nature of the information collected in the Log Books a Word Count is not appropriate.</p>

Identify final assessment component and element	<b>Component B 1. Forest survey report</b>	
% weighting between components A and B (Standard modules only)	<b>A:</b>	<b>B:</b>
	<b>Pass/Fail</b>	<b>100%</b>
<b>First Sit</b>		
<b>Component A</b> (controlled conditions) <b>Description of each element</b>	<b>Element weighting</b>	
1. Test on identification of tropical organisms and performance of undertaking advanced survey techniques in the field.  NB. To pass Component A students must achieve a competency mark of 60% or above	Pass/Fail	
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b>	
1. Field log book (1)	50%	
2. Field log book (2)	50%	

<b>Resit (further attendance at taught classes is not required)</b>		
<b>Component A</b> (controlled conditions) <b>Description of each element</b>	<b>Element weighting</b>	
1. Examination on field techniques in the tropics (1 hour)  NB. To pass Component A students must achieve a competency mark of 60% or above	Pass/Fail	
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b>	
1. Extended essay (3000 words)	100%	
If a student is permitted an <b>EXCEPTIONAL RETAKE</b> of the module the assessment will be that indicated by the Module Description at the time that retake commences.		