

# **ACADEMIC SERVICES**

# **MODULE SPECIFICATION**

Part 1: Basic Data						
Module Title	Conservation Biology					
Module Code	USSKAK-30-2		Level	2	Version 2	
Owning Faculty	Health & Applied	d Sciences	Field	Biological, Biomedical and Analytical Sciences		
Contributes towards	FdSc. Integrated Wildlife Conservation					
UWE Credit Rating	ECTS Credit			Module		
	30	Rating	15	Туре	Standard	
Pre-requisites	USSKAA-30-1 Ecology and		Co- requisites	None		
	Environmental S	Systems	•			
Excluded	None		Module Entry	None		
Combinations			requirements			
Valid From	September 2014		Valid to	September 2020		
	September 2017	' (v2)				

CAP Approval Date	28/03/2014		
	01/02/2017 (v2)		

	Part 2: Learning and Teaching
Learning Outcomes	<ul> <li>On successful completion of this module students will be able to:</li> <li>discuss the importance of biodiversity and the need for its conservation (assessed in Component A);</li> <li>recognise those factors that make individual species or populations vulnerable to extinction (assessed in Component A, B2);</li> <li>make reasoned, practical suggestions for the conservation of biodiversity at a range of levels (e.g. population, species, habitat) (assessed in Component A, B1);</li> <li>compare and contrast a range of conservation strategies (assessed in Component A, B1);</li> <li>record ecological data, analyse, interpret, and present findings using appropriate mathematical skills (Component B2).</li> </ul>
Syllabus Outline	Introduction to Conservation Biology What is Conservation Biology? Why is it important? Why conserve biodiversity? In the early stages sessions will highlight how the discipline came about and what it is that Conservation Biology focuses on. You learn to identify diversity at a genetic, species and community level and assess biodiversity on a global scale.  Losses of biological diversity It is impossible to assess the level of concern without having knowledge of extinction rates past and present. Throughout this section of the module you will research the current fitness of populations and attempt to identify those vulnerable to extinction.  Causes of extinction

In order to implement effective conservation practices we must understand the factors that threaten a species or a habitat. Previous research has shown us that it is difficult to stop these threats altogether, but appropriate management and integration with communities can be successful in reducing the impact.

### Conservation at the population level

Upon identifying the knowledge required to fully understand the population biology and natural history of a population, we will assess how to successfully monitor species in the field and carry out population viability analysis in order to prioritise for conservation.

### Conservation at a habitat level

Establishing protected areas is not a simple game: knowledge of a population is essential to ensure the habitat provides the appropriate space, resources and biotic interactions that are required to sustain a population. This section will encourage critical analysis of designated areas where we will evaluate successes and failures and suggest future management techniques.

### Ex-situ conservation strategies

Although we will focus on *in-situ* conservation we are never in doubt of the need for *ex-situ* options. Throughout the module reference will be made to zoological and botanical gardens, seed banks etc. and we will analyse the benefits of these strategies and assess their future role in conservation.

### **Practical conservation methods**

Employ habitat surveys of plant communities to develop an appreciation of organism identification skills and diversity metrics. Use population estimation techniques as well as gaining an appreciation of the conservation influences on those populations and their habitats. Team-working skills will be promoted through group work. Students will be required to collect data and perform analyses as part of an assessed field report

### **Contact Hours**

**Scheduled learning** Students can expect to receive a minimum of 72 hours taught material. This will be delivered as Interactive lectures. There will also be a residential field visit looking at practical conservation in action.

**Independent learning** Students are expected to spend 164 hours on independent learning tasks and preparation of assessments.

# Teaching and Learning Methods

Sessions will be made up of a mix of theory and interactive activities. During theory sessions students will be given research topics with which they must identify recent papers and report on in following weeks. Group discussions will also take place where students will share knowledge and research with peers to enhance understanding of the subject. There will also be guest speakers relevant to the topics.

Student learning will be supported through the University's E-Learning Environment, Blackboard. All sessions will be used to inform and provoke the process of critical thinking and awareness required for level 2.

The module will introduce the idea of analysing, synthesising and summarising information critically, including prior research. Learning methods include the application of knowledge and understanding to address familiar and unfamiliar problems.

**Scheduled learning** includes interactive lectures, workshop and supervised fieldwork.

**Independent learning** includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc.

Key Information								
Sets Information		Number	of credits for this	module		30		
		Hours to	Scheduled	Independent	Placement	Allocated		
		be allocated	learning and teaching study hours		study hours	Hours		
		300	136	164	0	300	•	
			Total assessm	ent of the mod	ule:		1	
			Writton ovem a	ssessment no	roontage	50%		
			Written exam as Coursework as			50%	1	
		-				1009/		
		L				100%		
Strategy	Any e e.g. s be rei any o	able to ther conic journal nation gate ant resource seed remotivelop their crees effect essential retudents may ferred to tee in the moother vehicle their reading ar indication onts will be arough use	eading will be ay be expected at that are avidule handbook e deemed apping is expected will be given given guidance of bibliograph	inbership of the variety of resolversity Library es, and to the livill be present rieval and evaluation indicated clear allable electro, via the moduropriate by the this will be in regarding how e on how to id	e University. Tources availaby's web pages library cataloged with opporal uation skills arly, along with a set text, be inically, etc. Tule information module/programmed with a set clearly to access the entify relevan	These included ble through we provide accurate. Many restructions within in order to id the method given a print his guidance on Blackbor gramme leadery. If specific them and, if approvided the specific them are specific than the specif	e a range of reb sites and ess to subject sources car in the curric entify such for accessi study pack will be ava ard or througers.	d ect n be ulum ing it, or ilable igh
Reading List	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.  Books							
	<ul> <li>Galatowitsch, S. M. (2012) Ecological Restoration. Sinauer Associate (ESSENTIAL READING POST CHRISTMAS)</li> <li>Groom, G, Mcflee G. and Carroll R, (2006) Principles of Conservation Biology. 3<sup>rd</sup> Edition. Sinauer Associates.</li> <li>Primack, R. B (2008) A primer of conservation biology. 5th Edition. Si Associates.</li> </ul>							

- Primack, R.B (2010) Essentials of Conservation Biology. 5th Edition.
   Macmillan Science.
- Pullin, A.S (2002) Conservation Biology. Cambridge University Press.
   Available as e-book

### **Journals**

- Conservation Biology
- Biological Conservation
- Journal of Applied Ecology

### **Electronic Resources**

- ARKive www.arkive.org
- UK BAP www.ukbap.org.uk
- International Union for the Conservation of Nature www.iucn.org
- IUCN Redlist for Endangered Species www.redlist.org
- Marine Conservation Society www.mcsuk.org
- Biodiversity Hotspots www.biodiversityhotspots.org
- Global Sea Turtle Network www.seaturtle.org
- IUCN Marine turtle specialist group www.iucn-mtsg.org/
- Finding Sanctuary http://www.finding-sanctuary.org/
- Natural England (Marine Conservation Zones) http://www.naturalengland.org.uk/ourwork/marine/mpa/mcz/default.aspx

## Part 3: Assessment

## Assessment Strategy

The Assessment Strategy has been designed to support and enhance the development of both subject-based and employability skills, whilst ensuring that the modules Learning Outcomes are attained, as described below. Assessments are designed to underpin students' learning and skills acquisition in the module and to provide for learning beyond the material delivered in the classroom. Assessments includes both summative (assessment that contributes to module mark) and formative (assessment that does not contribute to module mark) assessment and feedback opportunities.

The Controlled Conditions component of the assessment (Component A) comprises a single 2-hour exam which takes place at the end of the year. The paper is made up of longer answer questions, designed to test both the breadth of the students' subject knowledge and their understanding of key concepts. This component will test learning outcomes 1, 2, 3 and 4.

The Coursework component of the assessment (component B) is made up of two elements. Element one is a Case Study which requires students to assess the different methods used by conservation organisations for the conservation of a named species, (3000 words, worth 25% of total module marks). Element two is a Field Report which requires students to assess the different survey methods employed during their field trip (worth 25% of module marks) ). This component will test learning outcomes 2 and 5.

Opportunities for formative assessment are embedded in the module teaching and take a variety of forms, including: in class tests and quizzes, problem-solving workshops, and model answers for past exam questions.

Assessment criteria will be made available to the students in the module

guide at the start of the module. All work is marked using the Department's Generic Assessment Criteria, which in turn has been developed with reference to a range of external reference points, including the QAA Code of Practice on Assessment of Students, UWE's Learning, Teaching and Assessment Strategy, and UWE's E-learning policy.

Identify final assessment component and element				
% weighting between components A and B (Standard modules only)  A: 50% 50%				
First Sit				
Component A (controlled conditions) Description of each element		Element weighting (as % of component)		
1. Exam (3 hours) 100%				
Component B Description of each element	Element v			
1. Case Study	50%			
2. Field Trip report 50%				

Resit (further attendance at taught classes is not required)			
Component A (controlled conditions)	Element weighting		
Description of each element	(as % of component)		
1. Exam (3 hours)	100%		
Component B	Element weighting		
Component B Description of each element	Element weighting (as % of component)		

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.

## FOR OFFICE USE ONLY

First CAP Approval Date		28 <sup>th</sup> Mar	ch 2014		
Revision CAP Approval Date	15 <sup>th</sup> Nov 2016	ember	Version	2	RIA 12074