



MODULE SPECIFICATION

Part 1: Information			
Module Title	Advanced Ecosystem Conservation in Practice		
Module Code	USSKDD-30-M	Level	M
For implementation from	Feb 2018		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Health and Applied Sciences	Field	Environmental
Department	Applied Sciences		
Contributes towards	MSc Advanced Wildlife Conservation in Practice		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>This module provides a grounding in the concepts and methods for conserving ecosystems. Topics covered will include:</p> <p><u>What is Natural?</u> Concepts of wilderness and discussions around re-wilding.</p> <p><u>Ecosystem Structure and Function:</u> General principles of ecosystem structure and function including recent advances in ecological theory that impact on ecosystem function and conservation.</p> <p><u>Key threats to species and ecosystems:</u> Identification of the key threats to biodiversity and ecosystem protection: habitat loss and fragmentation, global climate change, invasive species, wildlife disease, mis-management, pollution.</p> <p><u>Ecosystem (re-) creation and restoration:</u> General principles of ecosystem (re-) creation and restoration; species conservation, habitat loss mitigation, revision of ecosystem services; natural succession vs. active restoration; re-introducing plants and animals; dealing with sites with special problems (fertility, toxicity, industrial waste etc); evaluation of success in restoration projects.</p> <p><u>Habitat Management:</u> What is habitat management and why is it necessary? General principles and techniques of habitat management. Setting aims and objectives and writing management plans.</p>

Module learning is underpinned by a range of subject-specific knowledge and skills, including:

- Techniques for habitat mapping and assessment
- Remote sensing, GIS, aerial photography etc.
- Sources and uses of archive material and data
- Policy and legislation relating to aspects of ecosystem conservation
- Project management (and other client-facing activity)
- Advanced statistics eg. multivariate techniques
- Report writing

Teaching will be a mixture of scheduled, independent, and distance learning.

Scheduled learning includes lectures, seminars, tutorials, practical classes and workshops; fieldwork; external visits; external speakers

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

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.

Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be expected to purchase a set text, be given or sold a print study pack or be referred to texts that are available electronically, etc. 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.

If further reading is expected, this will be indicated clearly. If specific texts are listed, a clear indication will be given regarding how to access them and, if appropriate, students will be given guidance on how to identify relevant sources for themselves, e.g. through use of bibliographical databases.

Part 3: Assessment: Strategy and Details

Strategy:

The assessments are designed to allow students to demonstrate the breadth and depth of their understanding of ecological principles and practice by applying their knowledge and skills to a real-world conservation problem. Students will work with a 'client' (e.g. land-owner or nature reserve manager) to review a management plan for a nature reserve or ecosystem restoration project that is local to them and consider the opportunity for increasing its function within the landscape ecological context.

Assessment 1 (Component B): Management Plan Review e.g:

- Students will review a reserve management plan and carry out a gap analysis. They will then validate sections of the management plan by designing, implementing and analysing a habitat survey of key areas of the reserve. The results will be designed to be fed back to a client.
- Indicative content extents:
 - Component B1: Review of management plan and gap analysis (1000 words)
 - Component B2: Habitat survey report (2000 words)
 - Component B2: Risk assessment (length as required)
- Resit: Students will review a complex reserve management plan and carry out a gap analysis. They will then carry out a critical literature review of management techniques for three contrasting habitat types of conservation concern found within that reserve (3000 words).
- Component B2 requires significant amounts of preparatory work and fieldwork, which justifies the 20/80 split.

Assessment 2 (Component A): Ecological network modelling e.g.

- Students will map the landscape context of a reserve using remote sensing data and GIS and identify areas of core, buffer and linking habitats as well as priority restoration zones. They will subsequently

<p>provide a critical analysis of a range of potential mechanisms for instigating habitat restoration within the wider landscape.</p> <ul style="list-style-type: none"> Indicative content extents: <ul style="list-style-type: none"> One series of maps with explanatory text (500 words) Review of restoration opportunities (2000 words) This will be the controlled element of the coursework since each student will be choose a separate reserve to model. 						
Identify final timetabled piece of assessment (component and element)		Component A				
% weighting between components A and B (Standard modules only)		<table border="1"> <tr> <td>A:</td> <td>B:</td> </tr> <tr> <td>50%</td> <td>50%</td> </tr> </table>	A:	B:	50%	50%
A:	B:					
50%	50%					
First Sit						
Component A (controlled conditions) Description of each element		Element weighting (as % of component)				
1. Ecological Network Modelling (2500 words)		100%				
Component B Description of each element		Element weighting (as % of component)				
1. Management Plan Review (1000 words)		20%				
2. Survey Results and Evaluation (2000 words)		80%				
Resit (further attendance at taught classes is not required)						
Component A (controlled conditions) Description of each element		Element weighting (as % of component)				
1. Ecological Network Modelling (2500 words)		100%				
Component B Description of each element		Element weighting (as % of component)				
1. Critical Literature Review (3000 words)		100%				
<p>If a student is permitted a retake of the module under the University Regulations and Procedures, the assessment will be that indicated by the Module Description at the time that retake commences.</p>						
Part 4: Learning Outcomes & KIS Data						
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> Demonstrate an in-depth and advanced knowledge of ecosystem structure and function, and relate ecological theory to the practice of ecosystem protection and species management in real world situations (<i>assessed in component A</i>); Develop conservation aims, objectives, and agreed management strategies for ecosystem conservation (<i>assessed in component B1</i>); Evaluate a range of survey methods available for the collection of ecological data in the field, including novel and cutting-edge techniques where appropriate (<i>assessed in component B2</i>); Critically discuss the effectiveness of a range of ecosystem management strategies in the context of the wider landscape (<i>assessed in component A</i>); Assess the range of threats and propose relevant habitat interventions to a defined landscape (<i>A, B1</i>). 					

<p>Key Information Sets Information (KIS)</p> <p>Contact Hours</p> <p>Total Assessment</p>	<p>The aim of this module is to provide a platform for students to gain an in-depth and advanced understanding of ecosystem conservation in practice.</p> <p>In order to achieve this aim the module uses a variety of teaching and learning methods and approaches, including face-to-face contact, independent learning, and distance learning that is facilitated through remote contact.</p> <p>Students will spend 60 hours in face-to-face contact, which is organised into 2 teaching blocks of 3-4 days per block. These direct contact hours will focus on the development of practical skills and analysis of real-world scenarios, and will offer opportunities for one-to-one and small group sessions with tutors to explore students' learning development, and enhance cohort identity. Group work and learning will be enhanced by the use of 'twilight' tasks, where students are given topics to research in their 'free' time within the teaching block, which they can then report on in a plenary session as the end of each teaching block.</p> <p>The majority of the theoretical component of the module will be presented through distance learning, through the delivery of lectures online, and will involve a number of technological enhancements. The learning of lecture content will be reinforced through time spent in independent learning by the directed reading of recommended texts and through the use of technology enhanced learning resources that will be provided online. This online learning and engagement will be delivered through several avenues:</p> <ul style="list-style-type: none"> • Synchronous online tutorials where the students will contribute to online activities that are facilitated by an academic; • Asynchronous discussions in the student's own time where they will engage/collaborate with other students on the course or in specified groups, and in which the academic is permitted to moderate where necessary, but is not expected to contribute. • Synchronous surgery sessions timetabled for a specific time in which the academic will be available online to answer live questions via discussion boards/blogs/collaborate or to respond to questions posted/asked prior to the session. • Interactive, online formative quizzes. <p>This formalised on-line contact will contribute a total of 12 hours toward the student's total contact time.</p> <p>The remaining 228 hours will be spent in independent learning, and in particular on the planning, implementation, analysis and reporting of the Management Plan tasks that form the summative assessment for the module.</p> <table border="1" data-bbox="533 1503 1444 1892"> <thead> <tr> <th colspan="5">Key Information Set - Module data</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td colspan="4">Number of credits for this module</td> <td>30</td> </tr> <tr> <td>Hours to be allocated</td> <td>Scheduled learning and teaching study hours</td> <td>Independent study hours</td> <td>Placement study hours</td> <td>Allocated Hours</td> </tr> <tr> <td>300</td> <td>72</td> <td>228</td> <td>0</td> <td>300</td> </tr> </tbody> </table> <p>The table below indicates as a percentage the total assessment of the module which constitutes a;</p> <p>Written Exam: Unseen or open book written exam</p>	Key Information Set - Module data										Number of credits for this module				30	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	300	72	228	0	300
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	<p>Coursework: Written assignment or essay, report, dissertation, portfolio, project or in class test</p> <p>Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam (i.e. an exam determining mastery of a technique)</p> <p><i>Please note that this is the total of various types of assessment and will probably not reflect the component and module weightings in the Assessment section of this module description: Note also that, if students must complete, e.g. a piece of coursework in order to pass the module, it should be included *even if it will not count towards the final assessment*</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="4">Total assessment of the module:</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="3">Practical assessment percentage</td> <td></td> <td>50%</td> </tr> <tr> <td colspan="3">Coursework assessment percentage</td> <td></td> <td>50%</td> </tr> <tr> <td colspan="3">Practical exam assessment percentage</td> <td></td> <td>0%</td> </tr> <tr> <td colspan="3"></td> <td></td> <td>100%</td> </tr> </table>	Total assessment of the module:										Practical assessment percentage				50%	Coursework assessment percentage				50%	Practical exam assessment percentage				0%					100%
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Reading List	https://uwe.rl.talis.com/lists/5FBF53EB-0D37-574F-DF65-0607EA39782C.html																														

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First CAP Approval Date	2 June 2015			
Revision CAP Approval Date <i>Update this row each time a change goes to CAP</i>	17 Jan 18	Version	2	RIA 12505