Module Descriptor

Title	Biological Conservation		
Session	2026/27	**Status**	Published
Code	BIOL09010	**SCQF Level**	9
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Health and Life Sciences**		
Module Co-ordinator	Beric Gilbert		

Summary of Module

This module continues organismal themes introduced in level 7 and appreciation of natural habitats introduced in level 8. It is concerned with ways in which we look at our environment in terms of biodiversity and focuses on methods used to obtain data to provide information on natural resources and environmental conditions that are so often affected by human activities. The main aims are to enable appreciation of the application of biological science to the description of environmental systems and their monitoring and development of skills in field techniques, in conjunction with relevant data handling, analysis and interpretation. Sampling techniques for sampling animals are reviewed. Potential problems relating to accurate and representative sampling are considered and the relevance of biodiversity to nature conservation is identified.

Habitat fragility and site management issues are considered, with regard to ecological impacts and their assessment. Key issues in global environmental conservation (e.g. climate change, over-exploitation, pollution, habitat destruction, multiple stressors) are included.

The value of organisms (eg. macroinvertebrates) to mankind is considered with a specific focus on environmental monitoring. Macroinvertebrate survey methods are dealt with in relation to the monitoring of changes in the quality of freshwater environments.

Aspects of water quality, including physical, chemical and biological indicators are outlined.

UWS graduate attributes covered include: gaining knowledge in data handling and scientific writing skills; enhancing teamwork skills and; improving professinal communication skills.

Module Delivery Method	On-Campus[1] ☒	Hybrid[2] ☐	Online[3] ☐	Work -Based Learning[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☒ Lanarkshire ☐ London ☐ Paisley	☐ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1	☒	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Demonstrate a broad and integrated knowledge of criteria and practice relating to conservation of biodiversity, with particular reference to the United Kingdom.
L2	Practice and evaluate a range of methods for the field sampling and assessment of biodiversity.
L3	Use and interpret numerical data relating to biodiversity measurement and evaluation.
L4	
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 9** Knowledge of the framework of biodiversity conservation in the UK, criteria and priorities.
Practice: Applied Knowledge and Understanding	**SCQF 9** Experience in sampling techniques for assessment and evaluation of biodiversity, with respect to selected habitats and groups of organisms.
Generic Cognitive skills	**SCQF 9** Evaluation of conflicts in habitat management, evaluation of data, development of diagnostic skills as exemplified by identification techniques, report writing.

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Communication, ICT and Numeracy Skills	**SCQF 9** Use of spreadsheet software, data analysis, use and comparison of ecological indices.
Autonomy, Accountability and Working with Others	**SCQF 9** Group work and cooperation in field sampling, data analysis and report production; consideration of impacts of sampling techniques.

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

This module is based on both theory and practical application of active conservation. The topic of Biological Conservation is covered taking a global perspective and highlighted with local examples. Students are required to attend lectures and to take part in group work for the completion of some assignments. One field trip, two laboratory practicles and one data analysis practicle are scheduled for within this module, which all students are expected to attend. In these sessions, bioassay techniques will be covered as well as laboratory skills relating to analysis of samples collected from the field. The data gathered through these exercises will then be analysed to demonstrate how environmental data is compared and interpreted.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	24
Laboratory / Practical Demonstration / Workshop	24
Independent Study	152
n/a	
n/a	
n/a	
TOTAL	200

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Contents of VLE for this module.

Microsoft Excel

Jarvis, P. J. (2000). Ecological principles and environmental issues. Harlow: Prentice Hall.

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are attending and participating in all timetabled programme activities including on-campus and online teaching sessions, asynchronous online learning activities, placement, work-based elements, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** Attendance is completely on-campus for all classes, practicals and tutorials.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Biological Sciences Health**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☒ **Yes** ☐ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Biology
Moderator	Kath Sloman
External Examiner	J Spicer
Accreditation Details	
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	4

Assessment (also refer to Assessment Outcomes Grids below)

Assessment 1
Course work and lab assignments
Assessment 2
Report: Field work and lab report
Assessment 3
Final class test / exam
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Laboratory/ Clinical/ Field notebook	☒	☒	☒	☐	☐	20	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Report of practical/ field/ clinical work	☒	☒	☒	☐	☐	20	0

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Class test (written)	☒	☒	☒	☐	☐	60	3
Combined total for all components						100%	3 hours

Change Control

What	**When**	**Who**
Updated Assessment Type and Moderator	February 2026	B Gilbert