University of the West of Scotland
Module Descriptor

Session: 2023/24

Last modified: May 24

Status: Published

Title of Module: Environmental Research Project

Code: BIOL10026	SCQF Level: 10 (Scottish Credit and Qualifications Framework)	Credit Points: 60	ECTS: 30 (European Credit Transfer Scheme)
School:	School of Health and Life Sciences		
Module Co-ordinator:	Mhairi Alexander		

Summary of Module

This module provides students with a supervised introduction to independent ecological research, analogous with professional research practice. Students will learn how to design, plan and implement a research project, in addition to further developing skills in data analysis, presentation and scientific writing.

Students will refine critical analytical skills through exposure of a range of ecological research topics. The module will expose students to the latest developments and research outputs in the fields of animal behaviour, conservation biology, ecology, ecotoxicology, evolutionary biology, marine/freshwater biology and zoology.

Students will apply skills learned across the breadth of the biology-related provision in the design, conduct, analysis and presentation of a data-based project spanning two semesters, producing a project proposal, a literature review, log book and project report. Students will also present their work to peers at two seminar sessions.

Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
			✓		

Face-To-Face
Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

Blended
A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

Fully Online
Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.

HybridC
Online with mandatory face-to-face learning on Campus

HybridO
Online with optional face-to-face learning on Campus

Work-based Learning
Learning activities where the main location for the learning experience is in the workplace.

Campus(es) for Module Delivery

The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
			✓			

Term(s) for Module Delivery
(Provided viable student numbers permit).

Term 1	✓	Term 2		Term 3	

Learning Outcomes: (maximum of 5 statements)

On successful completion of this module the student will be able to:

L1. Develop and utilise scientific skills appropriate to a particular ecological research discipline to plan and design a research project.

L2. Prepare an independent critical review of literature in order to identify an agreed testable question and develop/refine critical analytical skills by engaging with a range of ethical and biologically-related research models.

L3. Collect, collate and analyse data in a scientific manner using appropriate methodologies and procedures.

L4. Communicate findings and conclusions of project in a written and spoken form.

L5. Act autonomously, or with little guidance, to devise and sustain an independent project to develop new areas of knowledge and skills as necessary.

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 Level 10. To develop detailed knowledge and understanding in a specialised area, informed by or at the forefront of the subject/discipline. Knowledge and understanding of a range of established techniques of enquiry and/or research methodologies.
Practice: Applied Knowledge and Understanding	SCQF Level 10. Execute a defined project of research to derive relevant outcomes. Practice in a range of professional contexts that exhibit uncertain outcomes. Use skills, practices or materials which are specialised, advanced, or at the forefront of a subject or discipline
Generic Cognitive skills	SCQF Level 10. Critically identify, define, conceptualise, and analyse complex/professional level problems and issues. Critically review and consolidate knowledge, skills and practices. Demonstrate some originality during project implementation.
Communication, ICT and Numeracy Skills	SCQF Level 10. Use a wide range of routine skills in addition to some advanced and specialised skills. Use a range of software to analyse data and produce a professional report, including interpretation. Use and evaluation of a wide range of numerical and graphical data.
Autonomy, Accountability and Working with others	SCQF Level 10. Exercise autonomy and initiative during the project work. Exhibit awareness of responsibilities in a multi-user environment e.g. a laboratory. Work effectively with

project supervisor. Demonstrate an awareness of current ethical issues and adopt a professional code of conduct.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	Only available for students on programme codes BSc/ABZ (Applied Bioscience and Zoology), ERASMUS
Co-requisites	**Module Code:**	**Module Title:**

* Indicates that module descriptor is not published.

Learning and Teaching

This module is delivered as a long-thin module over T1-T2 and will require the student to undertake an investigation of a research-based topic with an environmental focus. A review of the literature will be prepared and a practical investigation carried out to generate data for analysis. In some cases a non-laboratory based topic may be investigated. A final report will be prepared to present the findings and conclusions of the research project.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Laboratory/Practical Demonstration/Workshop	300
Lecture/Core Content Delivery	40
Independent Study	250
Personal Development Plan	10
	600 Hours Total

**Indicative Resources: (eg. Core text, journals, internet access)

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

Dedicated VLE.

Access to primary literature is essential.

Specialised reference material, books and online databases.

(**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)

Engagement Requirements

In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: Academic engagement procedure

Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here: Attendance at synchronous sessions (module tutorials and supervisor meetings/tutorials), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

Supplemental Information

Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	No
Subject Panel	Biology L7-11
Moderator	Kath Sloman
External Examiner	S Rueckert
Accreditation Details	
Changes/Version Number	1.06 Changed delivery to HybridC Updated delivery terms to reflect long thin T1-2

Assessment: (also refer to Assessment Outcomes Grids below)
Term 1: Project proposal poster (10%), Literature review (20%), Project practical work
Term 2: Final project report (40%), Project presentation (10%)
Term 2: Project conduct and PDP (20%)
(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 Handbook.)

Assessment Outcome Grids (Footnote A.)

Component 1

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Dissertation/ Project report/ Thesis	✓	✓		✓	✓	20	0
Demonstrations/ Poster presentations/ Exhibitions	✓	✓		✓	✓	10	4

Component 2

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Dissertation/ Project report/ Thesis	✓	✓	✓	✓	✓	40	0
Presentation	✓	✓	✓	✓	✓	10	4

Component 3

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Workbook/ Laboratory notebook/ Diary/ Training log/ Learning log	✓	✓	✓	✓	✓	20	0
Combined Total For All Components						100%	8 hours

Footnotes
A. Referred to within Assessment Section above
B. Identified in the Learning Outcome Section above

Note(s):
1. More than one assessment method can be used to assess individual learning outcomes.
2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).
This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

Equality and Diversity

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.
UWS Equality and Diversity Policy

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)