Module Descriptor

Title	Bioscience Research Project		
Session	2025/26	**Status**	Published
Code	BIOL10006	**SCQF Level**	10
Credit Points	40	**ECTS (European Credit Transfer Scheme)**	20
School	**Health and Life Sciences**		
Module Co-ordinator	Gary Litherland		

Summary of Module

A supervised introduction to biological or environmental health scientific research in order to develop independent problem solving skills, providing students with analogues of professional research practice.

To develop/refine critical analytical skills through exposure of a range of research paradigms over a variety of ethical and biological or environmental health topics.

To apply skills learned across the breadth of biology or environmental health-related provision in the design, conduct, analysis and presentation of a data-based project spanning two semesters, producing thereby a literature critique, log book and project report in the form of a concise scientific paper, or multimedia format.

This module is also suitable for students wishing to engage with biological or environmental health aspects of research.

In this module you will gain graduate attributes. These are the skills, personal qualities and understanding to be developed through your university experience that will prepare for life and work in the 21st century. As a graduate from UWS you will be:

Universal - globally relevant with comprehensively applicable abilities, skills and behaviours

Work ready - dynamic and prepared for employment in complex, ever-changing environments which require lifelong learning and resilience

Successful - as a UWS graduate with a solid foundation on which to continue succeeding and realising my potential, across various contexts

Through studying and graduating from UWS, you will develop attributes across three dimensions:

Academic - knowledge, skills and abilities related to high-level academic study

Personal - qualities and characteristics of well-rounded, developed, responsible individuals

Professional - skills, aptitudes and attitudes required for professional working life in the 21st Century.

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	Acquire experience of researching an identified biological or environmental health question using knowledge and understanding acquired in the programme.
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 or environmental health-related research models.
L3	Collect, collate and analyse data in a scientific manner.
L4	Develop skills and gain experience relevant to the experimental and/or theoretical aspects of the problem posed, including modification and redesign to address emerging issues. Report results both orally and in the form of a concise scientific paper.
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 10** To develop detailed knowledge and understanding in a specialized 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 10** Execute a defined project of research to derive relevant outcomes. Practice in a range of professional contexts that exhibit uncertain

[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

	outcomes. Use skills, practices or materials which are specialized, advanced, or at the forefront of a subject or discipline.
Generic Cognitive skills	**SCQF 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 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 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.

Prerequisites	**Module Code**	**Module Title**
	Other Pre Requisites - The student must fulfil the entry qualifications to the appropriate Honours Programme. Co-Requesite - Complementary programme	
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 will require the student to undertake an investigation of a research-based topic in bioscience. 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** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Laboratory / Practical Demonstration / Workshop	228
Tutorial / Synchronous Support Activity	12
Personal Development Plan	3
Independent Study	157
n/a	
n/a	

TOTAL	400

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Witchel, H. (2020) Writing for Biomedical Sciences Students (Macmillan Study Skills). First edition. Red Globe Press. Data Handling & Analysis (Fundamentals of Biomedical Science). Blann, A (2015) Oxford University Press.
(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 regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, 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 at synchronous sessions (meetings with supervisor(s), tutorials, Health and safety and laboratory induction and practicals), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

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	Andrew MacKenzie
External Examiner	A Tsaousis
Accreditation Details	IBMS/ RSB/ REHIS
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	5.03

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Literature critique (25%), Project practical work to be continued into Term 2
Assessment 2
Project conduct & logbook (15%), Oral presentation (10%), Final report (50%)
Assessment 3
(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**
Dissertation/ Project report/ Thesis	☒	☒	☒	☒	☒	25	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Dissertation/ Project report/ Thesis	☒	☒	☒	☒	☒	75	0

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	0 hours

Change Control

What	When	Who
Indicative resource list updated	July 2025	F Menzies