# University of the West of Scotland Module Descriptor

Session: 2023/24
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Status: Published

Title of Module: Masters Research Project

Code: BIOL11005	SCQF Level: 11 (Scottish Credit and Qualifications Framework)	Credit Points: 60	ECTS: 30 (European Credit Transfer Scheme)		
School:	School of Health and Life Sciences				
Module Co-ordinator:	W Gordon Mackay				

# **Summary of Module**

The research project will provide students with the opportunity to undertake an original investigation of an advanced or specialised topic relating to the course. It aims to put into practice the taught elements of the course. Students will gain experience of many aspects of research work including planning, experimentation and analysis, interpretation and presentation of results in the form of a research journal manuscript. Students will be expected to take responsibility for their own work while under the supervision of staff.

The supervisory research team will give formative feedback throughout the project (via weekly meetings with minutes and actions and critical examination of the literature review, product conduct, oral presentation, and report). All are part of the summative assessment of reports. On occasion there may be opportunities to undertake this project within industry.

Graduate attributes which will be developed in this module are critical thinking, analytical skills, research ethics, wide range of research skills, problem solving, self motivation, leadership skills, autonmy, drive and resilience

Please note: The fully online/distance learning version of the module is available only to students currently employed by an appropriate UK-based healthcare provider (e.g. IBMS-approved training site).

This module will work to develop a number of the key 'I am UWS' Graduate Attributes to make those who complete this module:

## Universal

- Critical Thinker
- Ethically-minded
- Research-minded

# Work Ready

- Knowledgable
- Effective Communicator
- Ambitious

## Successful

- Autonomous
- Resilient
- Driven

Module Delivery Method								
Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning			
		✓	1 1					

#### 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.

#### HvbridC

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	Campus(es) for Module Delivery									
	The module will <b>normally</b> 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. Critically evaluate and summarise current understanding of key scientific or health-related research in the form of a written report.
- L2. Design and carry out appropriate research in order to rigorously test a hypothesis, or revise current understanding.
- L3. Critically evaluate project results using appropriate methods and to draw conclusions as to their relevance to current understanding of the field.
- L4. Generate a formatted, structured, critical report detailing the background of the research, research aims, methods and analysis and a critical assessment of the research in terms of current understanding of that research area.

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 11.  Critical and integrated understanding of current literature, available research techniques and practice, applicability of appropriate statistical approaches and methods to the project.
Practice: Applied Knowledge and Understanding	SCQF Level 11.  Application of advanced research techniques, safety and calculation protocols.
Generic Cognitive skills	SCQF Level 11.  Critically reviewing current, literature relevant to the research topic.  Making judgements where information comes from a number of sources.  Demonstrating a high degree of originality in dealing with professional level issues relating to the research project.
Communication, ICT and Numeracy Skills	SCQF Level 11.  Interpreting, using and evaluating a unique range of numerical or graphical data.  Presentation of subject knowledge through report writing, poster and oral communication skills.
Autonomy, Accountability and Working with others	SCQF Level 11.  Designing a work profile, meeting deadlines for reports and presentations.  Integrating project requirements with technical support staff responsible for laboratories and specialist equipment.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:			
	Module Code:	Module Title:		
	Other:	Students will have undertaken BIOL11007 Research Design		
Co-requisites	Module Code:	Module Title:		

<sup>\*</sup> Indicates that module descriptor is not published.

# **Learning and Teaching**

The aim of this module is to experience a short independent research project. This module is student-led in so far as students are responsible for the planning and implementation of the project work (in consultation with relevant staff members). Planning will require a review of the appropriate literature and identification of the project aims. Performing practical work to achieve the agreed aims while working within health and safety and ethical guidelines. Practical work will be appropriately recorded and analysed. The completed, experimental procedures are presented as a research paper, consistent with the style of a relevant journal. In this, candidates are required to follow Instructions to Authors, which are provided by every journal.

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
Independent Study	300
	600 Hours Total

<sup>\*\*</sup>Indicative Resources: (eg. Core text, journals, internet access)

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

Access to library; electronic journals, advanced textbooks as per advice of each project supervisor

(\*\*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 (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. Attendance at synchronous sessions is not required for students undertaking the distance learning version of the module.

## **Supplemental Information**

Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	No
Subject Panel	Biology L7-11
Moderator	Steven Kelly
External Examiner	D Stobo
Accreditation Details	This module is part of the MSc Advanced Biomedical Science programme; accredited by Institute of Biomedical Science (IBMS).
Changes/Version Number	4.04  updated summary to include distance learning opportunity updated EDI and attendance to reflect division approach

## Assessment: (also refer to Assessment Outcomes Grids below)

Critical review of the relevant literature 30% of module mark

project work (planning and implementation, performance, logbook) 10%; Presentation 10%

Written thesis in form of research paper 50%

(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)	Weighting (%) of Assessment Element	Timetabled Contact Hours

Dissertation/ Project report/ Thesis	✓				30	0	
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Component 2						
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Dissertation/ Project report/ Thesis			✓	✓	50	0
Workbook/ Laboratory notebook/ Diary/ Training log/ Learning log		✓			0	0
Performance/ Studio work/ Placement/ WBL/ WRL assessment		✓			10	0
Presentation		✓			10	0
		Combined	Total For All	Components	100%	0 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.

Please refer to the UWS Equality and Diversity Policy at the following link: https://www.uws.ac.uk/about-uws/uws-commitments/equality-diversity-inclusion/

# **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)