

Module specification

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Module Code	SCI557
Module Title	Research Methods
Level	5
Credit value	20
Faculty	FAST
HECoS Code	100962
Cost Code	GAFS

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
BSc (Hons) Forensic Science	Core
BSc (Hons) Forensic Science with Placement Year	Core
BSc (Hons) Biochemistry	Core
BSc (Hons) Biomedical Science	Core

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	10 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	20 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	30 hrs
Placement / work based learning	0 hrs
Guided independent study	170 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	10/05/2023
With effect from date	September 2023
Date and details of revision	
Version number	1

Module aims

This module is intended to develop the student's understanding of what is required in academic research and provide support in preparing them for their dissertation. The module will introduce students to the process of devising, carrying-out and disseminating their own research in the form of a small-scale research project. Students will gain experience of formulating appropriate research questions, research designs, hypothesis testing and understand its application in the interpretation of analytical results, developing proposals, and critical selection of analytic techniques for conducting research in their chosen programme of study.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Examine relationships between theory and practice in undertaking research.		
2	Discuss the relative merits and applicability of various approaches to research design;		
	data collection and analysis, and the concepts which underpin such approaches.		
3	Discuss the ethical issues and Glyndŵr University procedures associated with conducting		
	research.		
4	Reflect upon own experience of carrying out a small-scale research project.		

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

Assessment 1: Written Assignment (~2500 words)

A project report on the 20 hour small-scale project to include self-reflection.

Assessment 2: Presentation

A conference style poster displaying the small-scale research project

Assessment 3: Written Assignment (~1500 words) A project plan for the final year dissertation module

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	4	Written Assignment	50
2	2-3	Presentation	20
3	1	Written Assignment	30

Derogations

None

Learning and Teaching Strategies

In accordance with the university's Active Learning Framework Lectures and tutorials will be supported by online provision. Laboratory based mini projects will be 20 hours long. Directed study tasks will enable students to explore methods most applicable to their area of research.

Indicative Syllabus Outline

- Approaches to research (e.g. quantitative and qualitative methods)
- Objectivity/subjectivity and research bias, validity and reliability
- Conducting literature research
- Undertaking small-scale research projects
- Analysing and presenting research data
- Ethical issues and Wrexham Glyndŵr University procedures associated with conducting research

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads

Thomas, G. (2022), *How to do your Research Project: A Guide for Students,* London: Sage Publishing.

Other indicative reading

Machi, L.A. & McEvoy, B.T. (2016), *The Literature Review: Six Steps to Success*. California: Cowin Press:

Bell, J. & Waters, S. (2014), *Doing Your Research Project: A Guide for First-time Researchers*. 6th Edition, Berkshire: Open University Press.

Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

Core Attributes

Engaged
Enterprising
Creative
Ethical

Key Attitudes

Commitment Curiosity Resilience Confidence Adaptability

Practical Skillsets

Digital Fluency
Organisation
Critical Thinking
Emotional Intelligence
Communication