University of the West of Scotland

Module Descriptor

Session: 2022/23

Last modified: 15/03/2022 19:32:10
Status: Published

Campus(es) for Module Delivery

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

Title of Module: Forensic Evidence- Analysis and Retrieval

Code: BIOL08026	**SCQF Level: 8** (Scottish Credit and Qualifications Framework)	**Credit Points: 40**	**ECTS: 20** (European Credit Transfer Scheme)
School:	School of Health and Life Sciences		
Module Co-ordinator:	David Thompson		

Summary of Module

This module will introduce the techniques and protocols used to investigate crime scenes. This will cover a large range of material including physical evidence, biological evidence and trace evidence.

A series of laboratory sessions will be undertaken supporting the material covered, including evidence packaging, fingerprinting, presumptive and confirmatory testing for a range of biological materials, and forensic microscopy.

If you have an inquiring mind, this module will give you insights into the thought processes required by crime scene examiners and will also help you further develop your problem solving abilities and skills.

The module will be assessed by four class tests and the submission of a portfolio of written work.

This module will provide opportunities to develop the following UWS graduate attributes:

Critical Thinker, Collaborative, Problem Solver, Effective Communicator

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.

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. Apply the fundamental principles of forensic science to crime scene analysis.

L2. Describe the principles and practice of evidence collection, preservation and packaging

L3. Demonstrate competency in a range of forensic and technical laboratory skills

L4. Describe the composition of, and the techniques of analysing, tissues and biological fluids

L5. Describe the importance of quality issues relating to the collection and analysis of evidence

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 8. A broad knowledge of the scope, defining features and main areas of Forensic Science. Demonstrate a broad knowledge of the characteristics of environmental trace evidence. Explain the methods used to collect, store and analyse biological trace evidence Demonstrate knowledge of health and safety issues associated with crime scene management and handling biological evidence.
Practice: Applied Knowledge and Understanding	SCQF Level 8. Use of a range of microscopy techniques to analyse trace evidence Using a range of routine skills and techniques associated with Forensic Science. Use knowledge gain to propose solutions to practical problems in a routine but unfamiliar context

Generic Cognitive skills	SCQF Level 8. Evaluating evidence according to Forensic Science principles and practice. Acquire detailed information from a range of varied sources Link together the different content strands when writing reports on practical activities. Following feedback on laboratory reports there will be opportunities for reflection.	
Communication, ICT and Numeracy Skills	SCQF Level 8. Use a range of research skills, such as interrogation of electronic databases, to obtain and evaluate information relevant to a forensic case study Communicate effectively, orally and in writing using data analysis where appropriate. Convey complex ideas in a well-structured and coherent form.	
Autonomy, Accountability and Working with others	SCQF Level 8. Take account of own and others' roles, responsibilities and contributions in evaluating a crime scenario. Work in teams during practical activities, displaying time management and negotiating skills	
Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	
Co-requisites	**Module Code:**	**Module Title:**

* Indicates that module descriptor is not published.

Learning and Teaching	
This module is delivered over terms one and two. This module will be delivered through a mixture of lectures, tutorials and practical laboratory sessions.	
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)
Lecture/Core Content Delivery	36
Laboratory/Practical Demonstration/Workshop	48
Tutorial/Synchronous Support Activity	12
Asynchronous Class Activity	0
Independent Study	304
	400 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:

Jackson, A. & Jackson, J., Forensic Science, 2nd Edition, Pearson Education (2016)

Langford, A., Dean, J., Reed, R., Holmes, D., Weyers, J., Jones, A., Practical Skills in Forensic Science (2018)

White, P., Crime Scene to Court : The Essentials of Forensic Science, Royal Society of Chemistry (2016)

Essential Forensic Biology 3rd Edition (2019), Gunn; Wiley ISBN-10: 1119141400

Additional resources will be made available using the module's VLE page.

(**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 (lectures, tutorials and practicals), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module. This module has a practical element as part of the Royal Society of Biology accreditation which must be attended

Component 2

Assessment Type	Learning	Learning	Learning	Learning	Learning	Weighting	Timetabled

Supplemental Information

Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	No
Subject Panel	Biology L7-11
Moderator	Steven Kelly
External Examiner	A Tsaousis
Accreditation Details	This module is part of the BSc (Hons) Applied Bioscience with Forensic Investigation programme; accredited by Royal Society of Biology (RSB)
Changes/Version Number	1.05 Minor changes

Assessment: (also refer to Assessment Outcomes Grids below)

Class Test - 30%

Portfolio of written reports - 70%

Clinical/ Fieldwork/ Practical skills assessment/ Debate/ Interview/ Viva voce/ Oral - Pass/Fail

(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
Class test (written)	✓	✓			✓	30	8
(Footnote B.)	**Outcome (1)**	**Outcome (2)**	**Outcome (3)**	**Outcome (4)**	**Outcome (5)**	**(%) of Assessment Element**	**Contact Hours**
Portfolio of practical work			✓	✓		70	48

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
Clinical/ Fieldwork/ Practical skills assessment/ Debate/ Interview/ Viva voce/ Oral			✓			0	0
					Combined Total For All Components	100%	56 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)