Module Descriptor

Title	Forensic Evidence- Analysis and Retrieval		
Session	2024/25	**Status**	Published
Code	BIOL08026	**SCQF Level**	8
Credit Points	40	**ECTS (European Credit Transfer Scheme)**	20
School	**Health and Life Sciences**		
Module Co-ordinator	D. 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	**On-Campus[1]** ☒	**Hybrid[2]** ☐	**Online[3]** ☐	**Work -Based Learning[4]** ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☒ Lanarkshire ☐ London	☐ Online / Distance Learning	

[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

			☐ Paisley		☐ 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	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 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 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 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 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 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

Prerequisites	**Module Code**	**Module Title**
	Other	
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 covers a wide variety of theoretical, conceptual and practical areas, which require a range of knowledge and skills to be displayed and exercised. Delivery of its syllabus content therefore involves a diversity of teaching and assessment methods suitable to the learning outcomes of the module; these include formal lectures, structured tutorials (work closely integrated with the lecture material), laboratory exercises to develop practical skills and familiarisation with equipment and experimental techniques, completion and submission of written coursework making use of appropriate forms of IT and VLE, and independent study.	
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)

Lecture / Core Content Delivery	36
Laboratory / Practical Demonstration / Workshop	48
Tutorial / Synchronous Support Activity	12
Independent Study	304
Please select	
Please select	
TOTAL	400

Indicative Resources

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

(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:

The university is committed to providing a supportive learning environment that actively facilitates student success. In this module, there is a high degree of student-led flexibility. You are academically engaged if you are regularly engaged with scheduled live sessions on-campus and online, including engaging with online learning activities in your own time, course-related learning resources, and with timely completion and submission of assessments. Whilst we understand that there may be times when conflicting priorities make participation challenging, for you to gain the most from this module it is recommended that you participate in all scheduled live classes and complete your self-directed learning activities in a timely manner. It may be difficult to pass the assessment associated with this module if you are not regularly engaging with the module work and live classes. We may reach out to check how things are going and offer support if we observe that you have not been attending sessions or completing online activities

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	S. Kelly
External Examiner	A. Tsaousis
Accreditation Details	This module is part of the BSc (Hons) Applied Bioscience, BSc (Hons) Applied Bioscience with Forensic Investigation and BSc (Hons) Applied Bioscience and Zoology programmes; accredited by Royal Society of Biology (RSB).
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	1.06

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Class Test - 30%
Assessment 2
Portfolio of practical work - 70%
Assessment 3
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 Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☒	☒	☐	☐	☒	30	8

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Portfolio of practical work	☐	☐	☒	☒	☐	70	48

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**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

Change Control

What	**When**	**Who**