

University of the West of Scotland

Module Descriptor

Session: 2024/25

Title of Module: Science and Crime			
Code: CHEM0706	SCQF Level: 7 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Computing, Engineering, and Physical Sciences		
Module Co-ordinator:	Ann-Sophie Korb		
Summary of Module			
<p>This module is about Forensic Science and its place in modern investigations. Students will examine how Forensic Science has developed, what it can achieve and how it is presented to the public through the media.</p> <p>Science in a legal setting is examined particularly in court, and the role of expert witnesses. Alcohol, drugs, and driving are also looked at from a forensic perspective and students have a chance to demonstrate their research and presentational skills as they take part in a mock trial of a drink driving case. Chemical and analytical techniques important to modern investigations are looked at through a combination of lecture and laboratory work e.g., chemical analysis and latent fingerprint enhancement.</p> <p>As the starting point for forensic analyses, Crime Scene Investigation is introduced, and students have a chance to work on a mock crime scene.</p> <p>The module is a core module to the Forensic Science degree programmes but is suitable for any student with an interest in Forensic Science.</p> <p>This module will work to develop a number of the key 'I am UWS' Graduate Attributes. Those who complete this module will have developed competencies in report writing, working to deadlines, making presentations, and working in teams.</p>			

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
See Guidance Note for details.					

Campus(es) for Module Delivery						
The module will normally be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	<input checked="" type="checkbox"/>	Term 2	<input type="checkbox"/>	Term 3	<input type="checkbox"/>

Learning Outcomes: (maximum of 5 statements) These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module. At the end of this module the student will be able to:	
L1	Demonstrate a knowledge of the normal work of forensic scientists from the crime scene to the laboratory and their role as an expert witness.
L2	Describe how Forensic Science has developed in parallel with other scientific advances and how forensic science is portrayed in the media.
L3	Show an understanding of the application of science to a selection of forensic topics; explosives, fingerprinting, drugs, alcohol and crime scene investigation.
L4	Carry out basic practical exercises relating to forensic science including laboratory examinations of unknown materials, developing fingerprints, and crime scene examination.
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 7 Participants will develop an understanding of the role of science in society and in crime investigation.
Practice: Applied Knowledge and Understanding	SCQF Level 7 Students will apply subject knowledge gained and information about the work of professional forensic scientists to a variety of

	exercises including laboratory work, crime scene investigations and court room presentations	
Generic Cognitive skills	<p>SCQF Level 7</p> <p>Within the module students will have the opportunity to discuss and debate forensic science information from the media and from laboratory work. Student will also evaluate information presented in court</p>	
Communication, ICT and Numeracy Skills	<p>SCQF Level 7</p> <p>Students will develop their written and oral communication skills to present complex scientific information gained from library research or laboratory work. ICT skills will be used to access the resources available on the VLE, and other websites. Powerpoint will be used to present Crime Scene Investigation information</p>	
Autonomy, Accountability and Working with others	<p>SCQF Level 7</p> <p>Students will be able to display initiative in researching and presenting evidence in a mock drink driving trial. Through study and role play students will be able to gain an understanding of a variety of professional roles in a court room. As a group students will be able to carry out and report the results of a crime scene investigation.</p>	
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	
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.	
<p>Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:</p>	<p>Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)</p>
Lecture/Core Content Delivery	24

Tutorial/Synchronous Support Activity	12
Laboratory/Practical Demonstration/Workshop	12
Independent Study	152
	Hours Total 200

****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. (2017) *Forensic Science*, 4th edn., Harlow: Pearson Education Ltd.

White, P. (2004) *Crime scene to court: The essentials of forensic science*, 4th edn., Cambridge: Royal Society of Chemistry

Please ensure the list is kept short and current. Essential resources should be included, broader resources should be kept for module handbooks / Aula VLE.

Resources should be listed in Right Harvard referencing style or agreed professional body deviation and in alphabetical order.

(*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 of all classes (classes and laboratories), regular engagement with online materials, and submission of assessments.

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](#).

Please ensure any specific requirements are detailed in this section. Module Co-ordinators should consider the accessibility of their module for groups with protected characteristics..

Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module is laboratory-based and as such you are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations. More information on the University's EDI policies can be accessed at: <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)

Supplemental Information

Divisional Programme Board	Physical Sciences
Assessment Results (Pass/Fail)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
School Assessment Board	Physical Sciences
Moderator	Callum McHugh
External Examiner	I. Turner
Accreditation Details	This is a core module on a programme Accredited by the Chartered Society of Forensic Sciences
Changes/Version Number	Summary of Module minor updates Module Delivery: From Hybrid-C to Face-to-Face. Attendance and Engagement Requirements: sentence added to clarify meaning of attendance/engagement in this module. Accreditation Details: Chartered Society of Forensic Sciences added.

Assessment: (also refer to Assessment Outcomes Grids below)

Assessment 1 – Class Test 55%

Assessment 2 – Report of Practical Work 30%

Assessment 3 – Presentation 15%

(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.)

Assessment Outcome Grids (See Guidance Note)

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)	X	X	X	X		55	0
Report of Practical Work			X	X		30	0
Presentation	X		X	X		15	0
Combined Total for All Components						100%	0 hours