

MODULE SPECIFICATION

Part 1: Information						
Module Title	Scien	ntific Investigation of Crime				
Module Code	USSJ	IRV-30-1	Level	Level 4		
For implementation from	2020-)-21				
UWE Credit Rating	30		ECTS Credit Rating	15		
Faculty	Facul Appli	ty of Health & ed Sciences	Field	Applied Sciences		
Department	HAS	Dept of Applied Sciences				
Module type:	Stand	Jard				
Pre-requisites		None				
Excluded Combinations		None				
Co- requisites		None				
Module Entry requirements		None				

Part 2: Description

Educational Aims: See Learning Outcomes.

Outline Syllabus: The syllabus includes:

Introduction of Locard's principle and history of Forensic Science.

Types of evidence and evidential value.

Volume crime and serious crime scene processing.

Crime scene documentation including photography and sketching.

Packaging and preservation of evidence.

Marks and impressions, including fingerprinting.

The nature of forensic evidence, sampling issues and analytical approaches.

Location and recovery of biological material for laboratory testing.

Components of biological fluids including the biochemistry of presumptive testing.

Bloodstain pattern analysis.

The persistence of DNA, either as stain or in terms of body, tissue.

Introduction to the processes involved in DNA analysis and the NDNAD.

Light and comparison microscopy as employed in examination of items and evidence.

Document examination using physical and chemical techniques including Electrostatic Detection

Apparatus and the Video Spectral Comparator.

Presumptive and screening tests for chemicals including immunoassays and thin layer chromatography.

Legislation pertaining to the misuse of drugs, and analytical methods for identifying suspect materials.

Legal and analytical aspects of alcohol analysis in body fluids.

The chemical processes involved in fires and explosions, specific issues concerned with these potential crime scenes and the chemical analysis of evidence.

Forensic examination and laboratory documentation of examination of materials such as paint,

plastics and hair; including issues of transfer, persistence and significance of findings.

Choice of analytical methods for a range of forensic samples.

Communication of scientific results.

Teaching and Learning Methods: The teaching and learning strategy is based around a blend of lectures, tutorials virtual practicals and a couple of laboratory practical exercises to apply the knowledge gained and develop a range of related skills which aid employability. Students will undertake an individual crime scene examination which will include documentation and reflection on their performance

Students will also be referred to documentary video material via Box of Broadcasts to relate their learning to a range of criminal cases and current forensic issues.

Part 3: Assessment

There are three aspects to the module content requiring the development of knowledge and skills in crime scene investigation, laboratory skills and oral communication of scientific information. These map to the three main component standards of the Chartered Society of Forensic Sciences which accredits the degree programmes to which this module contributes.

Summative assessments therefore consist of crime scene examination (observations of practical skills at the crime scene house and submission of a scale drawing as well as a Streamlined Forensic Report with reflection, laboratory examination. A portfolio of laboratory skills will be formed from physical and virtual laboratory classes as well as online quizzes.

Communication of scientific information will be assessed via an oral presentation of one specialism of forensic science.

The crime scene examination is undertaken individually. The portfolio of lab work is also individually assessed.

Formative assessment and feedback take place during online sessions and the use of videos of crime scene examinations. Subject knowledge and understanding is assessed throughout the year by a series of online quizzes and contributes to the coursework mark

The final controlled component comprises an online written exam in the 2nd assessment period. This is used to assess subject knowledge and understanding in more depth.

All work is marked in line with the Department's Generic Assessment Criteria and conforms to university policies for the setting, collection, marking and return of student work. Assessments are described in the Module handbook that is supplied at the start of module and detailed marking schemes for elements of coursework, where appropriate, are provided in advance.

First Sit Components	Final Assessment	Element weighting	Description
Practical Skills Assessment - Component A		16 %	Reflection on crime scene examination (including streamlined forensic report and scale drawing)
Portfolio - Component B		40 %	A series of on line quizzes and 3 virtual practical assessments

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Presentation - Component B		20 %	Oral presentation (10 minutes)
Examination (Online) - Component A	~	24 %	Online exam (24 hour submission window)
Resit Components	Final Assessment	Element weighting	Description
Report - Component B		30 %	Report on the techniques used to examine a specified evidence type
Professional Practice Report - Component B		30 %	Data analysis and practical write up (data supplied)
Practical Skills Assessment - Component A		16 %	Assessed crime scene examination (including streamlined forensic report)
Examination (Online) - Component A	~	24 %	Online examination (24 hour window for submission)

	Part 4: Teaching and Learning Methods			
Learning Outcomes	On successful completion of this module students will achieve the follo	wing learning	outcomes:	
	Module Learning Outcomes			
	Recognise and describe the various types of physical evidence, and understand their potential importance in a forensic investigation (assessed in components			
	Distinguish clearly between volume crime and serious crime, describe the personnel involved and the procedures used for the processing of both classes of scene			
	Examine and document simple crime scenes			
	Select and apply appropriate techniques for the recovery and preservation of evidence and the maintenance of the chain of custody			
	Describe techniques used in the laboratory examination of physical e	vidence	MO5	
	Undertake and document simple forensic tests and analyses			
	Understand the relevance of biological and chemical principles to forensic investigations			
	Communicate scientific material clearly to peers		MO8	
Contact Hours	Independent Study Hours:			
	Independent study/self-guided study	23	34	
	Total Independent Study Hours:	23	34	
	Scheduled Learning and Teaching Hours:			
	Face-to-face learning	6	6	
	Total Scheduled Learning and Teaching Hours:	6	6	

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	Hours to be allocated	300
	Allocated Hours	300
Reading List	The reading list for this module can be accessed via the following link:	
	https://uwe.rl.talis.com/modules/ussjrv-30-1.html	

Part 5: Contributes Towards

This module contributes towards the following programmes of study: