UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Forensic Examination and Analysis of Physical Evidence
Module Code	ARC5020-B
Academic Year	2020/1
Credits	20
School	School of Archaeological and Forensic Sciences
Subject Area	Forensic Science
FHEQ Level	FHEQ Level 5
Pre-requisites	N/A
Co-requisites	N/A

Contact Hours	
Type	Hours
Online Lecture (Synchronous)	48
Practical Classes or Workshops	6 (online workshop)
Laboratories	24
Directed Study	122

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Academic Year

Module Aims

To develop skills in the forensic examination of items of physical evidence in the laboratory, in the recovery and comparison or analysis of contact trace material, in the optical, physical and chemical enhancement of scene marks and the presumptive testing of some commonly encountered evidential stains, in the context of forensic standards (ISO 17025).

Outline Syllabus

Lectures: Latent finger marks. Physical & chemical enhancement of latent finger marks. Tool marks & other impression evidence. Glass manufacture, glass & glass evidence. Introduction to the identification of hairs & fibres. Expert witness statements for laboratory examinations. Light Microscopy & Scanning Electron Microscopy. Firearms & ballistics. Analysis of Firearms Discharge Residue. Fire & Fire Investigation. Revision of format and content of Expert Witness statements. Expert Evidence in Court. Lectures delivered online, may be brought on campus dependent upon conditions.

Practicals: Physical & chemical development of latent finger marks. Recovery of footwear mark evidence. Physical marks, cut marks on bone & glass evidence. Court procedures & mock court. Light Microscopy. Scanning Electron Microscopy. Firearms and ballistics. Fire Investigation. Court Exercise (formative).

Learning Outcomes

Outcome Number	Description
01	Appraise the scope, methodology and limitations of different techniques to examine evidential material in the context of a forensic enquiry.
02	Assess the role of different approaches to this physical evidence.
03	Examine a variety of physical evidence, interpret results from these and form an expert opinion.
04	Understand the application of a range of instrumental techniques to the examination of contact and trace evidence.
05	Understand the needs and requirements of quality assurance in the analysis of materials in a forensic context.
06	Understand the actions of different firearm types, the role of firearms examiners to a police investigation & the nature of firearms & ballistics evidence.
07	Understand the process of writing & expert witness statement for laboratory examinations, & the relationship between this & standard laboratory notes & recording forms.
08	Analyse data from an investigation. Write comprehensive, concise notes and an expert report. Communicate both in writing and orally to a variety of audiences at the appropriate level.

Learning, Teaching and Assessment Strategy

Lectures, seminars and practical laboratory classes.

Mode of Assessment

Type	Method	Description	Length	Weighting
Summative	Examination - Open Book	One 1.5 hour open book exam	1 hour 30 mins	50%
Summative	Coursework	Selected experimental findings, case notes and expert report 0-2000 words	N/A	50%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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