Module Specification

Forensic Analysis

Version: 2025-26, v3.0, Approved

Contents

Part 1: Information

Module title: Forensic Analysis

Module code: USSKAU-30-2

Level: Level 5

For implementation from: 2025-26

UWE credit rating: 30

ECTS credit rating: 15

College: College of Health, Science & Society

School: CHSS School of Applied Sciences

Partner institutions: None

Field: Applied Sciences

Module type: Module

Pre-requisites: Scientific Investigation of Crime 2025-26, Scientific Skills 2025-26

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Forensic Analysis builds upon previous programmatic learning through the introduction of laboratory techniques for the analysis of recovered forensic evidence. Students will gain in-depth knowledge and practical experience in the analysis of forensic evidence, in accordance with professional guidelines.

Pre-requisites: Students must pass USSJRW-30-1 Scientific Skills before starting this module.

Features: Not applicable

Educational aims: This module aims to provide students with the skills and experience they will need to obtain a degree accredited by The Chartered Society of Forensic Sciences and to embark upon a career as a professional forensic scientist.

Outline syllabus: Students will learn about the chemical and physical nature of materials of forensic interest e.g. fibres, glass, soil, paint, paper and ink, cartridges, accelerants and their environmental prevalence. The potential and realised evidential value of a range of these materials will be explored through reference to and critical evaluation of real forensic casework.

Students will learn about a broad range of forensic technology e.g. specialist microscopic techniques, spectroscopy and chromatography for the analysis/examination of e.g. fibres, glass, paper, ink, cosmetics, bullets, paint. They will develop analytical strategies related to hypotheses and the potential value of results. Adherence to professional practice standards is embedded throughout.

The interpretation of experimental results will be taught using appropriate software for data analysis and with regard to the limitations of forensic databases.

The role of various forensic specialists in the forensic examination of materials from serious scenes of crime will be discussed and students may undertake virtual or practical examinations, including scene examinations relating to these specialisms.

Part 3: Teaching and learning methods

Teaching and learning methods: The module is delivered through a mixture of interactive lectures and practical classes supported by workshops.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Demonstrate practical skill and theoretical understanding of the methods used for the location, sampling, extraction and analysis of commonly

encountered trace evidence and the importance of contamination avoidance procedures, quality standards and codes of practice in the laboratory.

MO2 Interpret and evaluate results obtained from a range of forensic examinations and analyses, with the use of databases and statistical approaches where appropriate.

MO3 Demonstrate good oral presentation skills which are understandable to the intended recipients.

MO4 Develop and evaluate a forensic analytical strategy for a given criminal case scenario.

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/usskau-30-2.html

Part 4: Assessment

Assessment strategy: Assessment Task 1: Presentation (20 minutes)
A viva voce based on the analysis of forensic evidence completed by the student within the laboratory. Students will be questioned to establish their depth of understanding of techniques that are employed in laboratory examinations and subsequent data analysis. Understanding of forensic evidential value will also be explored.

Students will be supported to succeed in this assessment through coursework support sessions. This assessment scaffolds from the oral presentations that students undertake at Level 4 in Human Biological Systems and to underpin the court assessment that students undertake in the Crime Scene to Court module at

level 6.

Assessment Task 2: Written Assignment (1500 words)
Laboratory Strategy Document (MG22a).
An industry standard document, which is part of the Streamlined Forensic Reporting (SFR) process. Students present an MG22a where they have detailed a proposed strategy for the examination of exhibits for a provided case scenario. Justification of the given strategy is supported through provision of a brief reflective evaluation. Introduction of this document provides scaffolding to level 6 were the other SFR documents are introduced in Crime Scene to Court. Facilitated data analysis and reflection in the taught classes will underpin this assessment.

Assessment tasks:

Presentation (First Sit)
Description: Viva voce on analysis of forensic evidence analysed within the laboratory (20 minutes)
Weighting: 55 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3

Written Assignment (First Sit)
Description: Laboratory strategy document (MG22a) with evaluative reflection (1500 words).
Weighting: 45 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO4

Presentation (Resit)
Description: Viva voce on analysis of forensic evidence analysed within the laboratory (20 minutes).
Weighting: 55 %

Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3

Written Assignment (Resit)
Description: Laboratory strategy document (MG22a) with evaluative reflection (1500 words).
Weighting: 45 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Forensic Science {Foundation} [Frenchay] BSc (Hons) 2023-24

Forensic Science {Foundation} [Frenchay] MSci 2023-24

Forensic Science [Frenchay] - WITHDRAWN MSci 2024-25

Forensic Science [Frenchay] BSc (Hons) 2024-25