**ACME Module Descriptor ( FOR103 )**

**as at 16/May/2025**

| **Module Code:** | FOR103 |
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| **Module Title:** | Essential Skills in Forensic Science |
| **Occurrence:** | A Dundee Based |

| **SCQF** | 07 | **Credits** | 20 |
| --- | --- | --- | --- |
| **Faculty** | Faculty of Social and Applied Sciences | S1 |
| **Department** | Department of Built Environment and Life Sciences | **Year** | 2024/5 |
| **Tutor** | Helen McMorris |
| **External Examiner(s)** | Not required |
| **Prerequisites** |  |
| **Corequisites** |  |
| **Replaced** |  |

**Brief Description**

This module introduces some of the main principles, practices and techniques used in forensic science both at the crime scene and in the laboratory. This will include the basic forensic practical skills involved in the recording, searching and examination of crime scenes, and the basic laboratory techniques involved in production analysis. This module will also introduce the concepts of scientific literacy and research skills. Through engaging with this module, you will develop the Intellectual, Professional, Personal and Active Citizen Abertay Attributes. In particular: \* Understand how knowledge is generated, processed and disseminated, and actively apply knowledge in order to recognise problems and solutions. \* Be able to work both independently and collaboratively, understanding the values and responsibilities of equality and playing a leadership and a team-member role as required \* Be equipped and motivated to continue learning and professional development throughout their careers \* Understand and embody self-awareness, honesty and integrity in their professional and personal lives. \* Be determined, ambitious, articulate, adaptable, self-reflective, resilient, practical, pro-active, innovative and enterprising \* Be inclusive, globally conscientious and socially respectful, and self-reflective

**Aims**

The aims of this Module are to provide the student with an introduction to crime scene examination skills and laboratory techniques, and explore the principles of scientific writing, library and research skills, along with an overview of forensic science.

**Learning Outcomes**

By the end of this module the student should be able to :
1. Describe the methodical and systematic examination techniques used to effectively search for evidence and accurately record a crime scene.
2. Describe the fundamental theories of forensic science protocols.
3. Use appropriate crime scene skills to record, package and label evidence.
4. Produce evidential documentation detailing the examination, analysis and interpretation of laboratory activities.

**Indicative Content**

1. **General Principles and History of Forensic Science:**
This will include an overview of the history and practice of forensic science, including case studies, the examination of scenes of crime as well as the nature of physical evidence, class and individual characterisation
2. **Forensic Science Techniques:**
Specialist areas including fires and explosions; fingerprints; firearms and ballistics; forensic uses of DNA, blood dynamics; questioned documents; microscopy; toolmarks and impressions.
3. **Practical Forensic Skills - Crime scene based:**
Recording of crime scene – notes, sketches. Evidence Preservation - avoidance of contamination, control samples, collection, packaging and labelling of evidence (choice of packaging, avoidance of loss, deterioration or tampering, sealing, labelling and transport); Methodology of Effective Sampling - Effective sampling of trace and contact evidence (handpicking, swabbing, tape lifts, sweeping, vacuuming). Representative sampling, known samples and negative controls.
4. **Practical Forensic Skills - Laboratory Based:**
Undertake a number of selected biological, chemical and forensic experiments, then interpret and report the data acquired.
5. **Information literacy and IT:**
This will include: how to use reading lists, library catalogues, online databases; the collection and evaluation of academic sources of writing, conventional formats and presentation, referencing, avoiding plagiarism, the planning and writing forensic scientific paperwork, defending academic arguments. Also how to use the University desktop, file management, standard desktop software, introduction to software tools.

**Statement on Teaching, Learning and Assessment**

The module introduces the history, concepts and practice of forensic science through a series of lectorials delivered by forensic experts, along with the development of scientific writing, library skills and presentation skills. Practical exercises will develop skills required in later years to effectively assess evidence and interpret results in complex situations. Key transferable skills developed in the module include: communication (written and oral), problem-solving (manipulation of data and the appropriate use of tables and graphs) and research skills.

**Teaching and Learning Work Loads:**

| **Total:** | 200 |
| --- | --- |
| **Lecture:** | 18 |
| **Tutorial/Seminar:** | 4 |
| **Supervised Practical Activity:** | 30 |
| **Unsupervised Practical Activity:** | 0 |
| **Assessment:** | 42 |
| **Independent:** | 106 |

**Assessment**

Submissions week days are as follows :
SAS - Monday
CAP modules, electives and micro-credentials - Tuesday
DIB - Wednesday

**Assessment Week Beginning**

| **Assessment** | **Type** | **Description** | **Final Grade Weighting(%)** | **Issue** | **Submission** | **Return** | **Assoc Learning Outcomes** | **Eligible for extension** | **Extensions are based onAssessment Due Date** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 001 | Presentation (Live) | Poster Presentation | 40 | 16/09/2024 | 28/10/2024 | 18/11/2024 | 1,2 | N/A | N/A |
| 002 | Practical (Live) | Practical exam with professional documentation | 60 |  |  |  |  |  |  |