



## Module Definition Form (MDF)

|                                    |   |
|------------------------------------|---|
| <b>Module code: MOD006137</b>      | <b>Version: 6 Date Amended: 12/Jul/2023</b> |
| <b>1. Module Title</b>             |   |
| Fire Investigation                 |   |
| <b>2a. Module Leader</b>           |   |
| Helen Goodey                       |   |
| <b>2b. School</b>                  |   |
| School of Life Sciences            |   |
| <b>2c. Faculty</b>                 |   |
| Faculty of Science and Engineering |   |
| <b>3a. Level</b>                   |   |
| 5                                  |   |
| <b>3b. Module Type</b>             |   |
| Standard (fine graded)             |   |
| <b>4a. Credits</b>                 |   |
| 15                                 |   |
| <b>4b. Study Hours</b>             |   |
| 150                                |   |

| 5. Restrictions                                    |   |             |           |
|--|---|-------------|-----------|
| Type   | Module Code   | Module Name | Condition |
| Pre-requisites:                                    | None  |             |           |
| Co-requisites:                                     | None  |             |           |
| Exclusions:  | None  |             |           |
| <b>Courses to which this module is restricted:</b> | FdSc Crime and Investigative Studies BSc (Hons) Crime and Investigative Studies BSc (Hons) Crime and Investigative Studies (Extended) BSc (Hons) Crime and Investigative Studies (Sandwich) |             |           |

## LEARNING, TEACHING AND ASSESSMENT INFORMATION

| 6a. Module Description   |
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| <p>Fire investigation is a specialist area that requires both theoretical and practical skills. You will be introduced to the agencies involved in fire investigation and the different roles therein, including the fire service and private agencies. You will also look at the various roles within the police service including police and scientific support officers who would be called in to a fire scene. The involvement of other agencies including the health and safety executive, the coroner and pathologists will be discussed. You will thus have the context to apply your understanding of this type of investigation in a broader field that introduces you to a wide variety of potential employability routes.</p> <p>You will learn through a mix of lectures, practicals and tutorial sessions, helping you to build understanding of how fire investigation is undertaken, from scene to court. You will learn how fires start, the dynamics of fire behaviour, and how to distinguish a variety of causes, including accidental and deliberate ignition. You will explore the investigation process of both criminal and non-criminal causes as well as fatal fire investigations. Your lectures and tutorials will enhance your understanding of the UK law and legal system, considering criminal, civil and coroner's courts.</p> <p>You will explore the different levels of expertise required in fire investigation and the specific roles involved in recognising, interpreting and reconstructing fire scenes. You will learn the importance of scene preservation, recording, health and safety, and forensic procedures and policies at the fire scene. Included are the recording, recovery and analysis of relevant forensic evidence types. You will be able to understand the context of a complex scene type within the broad nature of national forensic protocols and requirements, enabling you to demonstrate strong employability skills across the forensic, policing and wider investigative employer framework. Practical sessions and working in small groups in tutorials will develop your team working and collaborative practice, essential skills in forensic sector and investigative careers.</p> |

| 6b. Outline Content  |
|--|
| <p>This module will include the following topics:</p> <ul style="list-style-type: none"> <li>• Role of the fire investigator</li> <li>• Multi-agency approach</li> <li>• How and why do we investigate fire?</li> <li>• Origin and cause investigation</li> <li>• Identifying evidence</li> <li>• Evidence collection</li> <li>• Electricity and fire</li> <li>• Fire science</li> <li>• Explosion investigation</li> <li>• Fire scene reconstruction</li> <li>• Fatal fire investigation</li> <li>• Health and safety</li> <li>• Scene documentation</li> </ul> |

### 6c. Key Texts/Literature

The reading list to support this module is available at: <https://readinglists.aru.ac.uk/>

### 6d. Specialist Learning Resources

This module will require the use of specialised fire scene equipment and packaging consumables.

### 7. Learning Outcomes (threshold standards)

| No. | Type  | On successful completion of this module the student will be expected to be able to:  |
|-----|---|--|
| 1   | Knowledge and Understanding                                 | Identify and describe the investigation methods for determining causes of fire and fire dynamics.  |
| 2   | Knowledge and Understanding                                 | Describe fire investigation processes, including the roles within different fire safety agencies and personnel   |
| 3   | Intellectual, practical, affective and transferrable skills | Explain and evaluate the initiation, progress and behaviour of fire and the application of such knowledge in fire investigation and within a fire scene. |
| 4   | Intellectual, practical, affective and transferrable skills | Evaluate the processes of forensic recording, examination, recovery and analysis of evidence from fire scenes.   |

### 8a. Module Occurrence to which this MDF Refers

| Year   | Occurrence | Period                                      | Location | Mode of Delivery |
|--------|------------|---|----------|------------------|
| 2025/6 | ZZF        | Template For Face To Face Learning Delivery |          | Face to Face     |

### 8b. Learning Activities for the above Module Occurrence

| Learning Activities            | Hours      | Learning Outcomes | Details of Duration, frequency and other comments   |
|--------------------------------|------------|-------------------|---|
| Lectures                       | 12         | 1-4               | 6 x 1 hr & 2 x 3 hrs lectures/active learning   |
| Other teacher managed learning | 24         | 1-4               | Practicals (3 x 4 hrs + 2 x 2 hrs); Tutorials (3 x 2 hrs); Test (1 x 2 hrs)                                   |
| Student managed learning       | 114        | 1-4               | Background reading, online activities, preparation for lectures and practicals, and completion of assessments |
| <b>TOTAL:</b>                  | <b>150</b> |                   |   |

| <b>9. Assessment for the above Module Occurrence</b> |                          |                          |                      |                                |                            |
|--|--------------------------|--------------------------|----------------------|--------------------------------|----------------------------|
| <b>Assessment No.</b>                                | <b>Assessment Method</b> | <b>Learning Outcomes</b> | <b>Weighting (%)</b> | <b>Fine Grade or Pass/Fail</b> | <b>Qualifying Mark (%)</b> |
| 010  | Coursework               | 1-4                      | 60 (%)               | Fine Grade                     | 30 (%)                     |
| <b>Coursework (2000 words)</b>                       |                          |                          |                      |                                |                            |
| <b>Assessment No.</b>                                | <b>Assessment Method</b> | <b>Learning Outcomes</b> | <b>Weighting (%)</b> | <b>Fine Grade or Pass/Fail</b> | <b>Qualifying Mark (%)</b> |
| 011  | Coursework               | 1-4                      | 40 (%)               | Fine Grade                     | 30 (%)                     |
| <b>In Class test – duration 1 hour</b>               |                          |                          |                      |                                |                            |

**In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7\*).**

**In addition, students are required to:**

- (a) achieve the qualifying mark for each element of fine graded assessment as specified above**
- (b) pass any pass/fail elements**

**[\* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]**