

Liverpool John Moores University

Title: COMPUTER FORENSIC INVESTIGATIONS AND THE
CRIMINAL JUSTICE SYSTEM
Status: Definitive
Code: **6047COMP** (117459)
Version Start Date: 01-08-2018
Owning School/Faculty: Computer Science
Teaching School/Faculty: Computer Science

| Team | Leader |
|-----------------|--------|
| Thomas Berry | Y |
| Aine MacDermott | |

Academic Level: FHEQ6 **Credit Value:** 24 **Total Delivered Hours:** 72
Total Learning Hours: 240 **Private Study:** 168

Delivery Options

Course typically offered: Standard Year Long

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 12 |
| Practical | 30 |
| Workshop | 30 |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|--------------|-------------------|---|---------------|---------------|
| Artefacts | AS1 | Development of a simulated crime on a storage device | 20 | |
| Report | AS2 | Forensic report relating to the analysis of a simulated crime | 50 | |
| Presentation | AS3 | Presentation of the evidence found from the analysis of the simulated crime | 30 | |

Aims

*To develop an understanding of the role of the expert witness in trials involving computer forensics.
Identify a range of appropriate methodologies and tools used during an investigation.
Analysis of forensic images and preparation for presentation of results in a court of law.*

Learning Outcomes

After completing the module the student should be able to:

- 1 Identify techniques used by criminals to hide data and apply these to a simulated crime.
- 2 Demonstrate search and seizure procedures and preparation for taking an image of a storage device.
- 3 Analysis of a forensic image and preparation of a report of the findings.
- 4 Identify the legal issues relating to presenting evidence in a court of law.
- 5 Present evidence in the guise of an expert witness.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

| | | | |
|-----------------------|---|---|---|
| Simulated crime | 1 | | |
| Forensic Report | 3 | 4 | 2 |
| Forensic Presentation | 5 | | |

Outline Syllabus

*Identification of techniques used by criminals to commit crimes on digital devices,
Preparing a computer for investigation,
Processing the crime or incident scene,
Search preparation and the tools required to perform a search,
Securing evidence from the computer,
Data acquisition and the use of write blockers,
Identification of digital evidence on mobile devices,
Reporting the results of the investigation,
The role of the expert witness,
English Law and its application to computer forensic investigations,
Maintaining the chain of custody to ensure the integrity of evidence.*

Learning Activities

Lectures and practical work. The practical work builds on core forensic computing and English law concepts covered in the lectures.

Notes

To provide an understanding of computer forensics investigations and presentation of the results in a court of the law.