

Liverpool John Moores University

Title: ADVANCED FORENSIC METHODS
Status: Definitive
Code: **6003FSBMOL** (101551)
Version Start Date: 01-08-2019

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

Team	Leader
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Academic Level: FHEQ6 **Credit Value:** 24 **Total Delivered Hours:** 56
Total Learning Hours: 240 **Private Study:** 184

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	27
Practical	17
Workshop	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	portfolio	Portfolio	50	
Report	statement	courtroom statement	25	
Presentation	mock court	courtroom presentation	25	

Aims

To provide students with a thorough knowledge of advanced crime scene investigation including 360 degree photography, fire investigation and others as

applicable. Introduce new and novel research in forensic science in areas such as fingerprinting and ballistics and have practical knowledge of the use of statistical methods for evaluating forensic evidence. Court room skills.

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply frequentist and Bayesian statistics to various types of evidence.
- 2 Critically evaluate current and potential methods of crime scene processing and analysis, recording all aspects in a manner in keeping with current good practice
- 3 Submit reports interpreting a range of forensic analyses in a manner suitable for legal proceedings and present these in (mock) court
- 4 Critically review current literature covering a range of forensic science areas

Learning Outcomes of Assessments

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

portfolio	1	2	3	4
Courtroom statement	1	2	3	4
Courtroom presentation	1	3		

Outline Syllabus

Statistical tests appropriate to forensic science including case studies and different evidence types.

Recent research and advances in a number of areas within forensic science- for example fingerprinting, Ballistics, drug analysis. Appropriate practical techniques and sessions to enhance this learning.

Advanced crime scene analysis including photography, use of 360 degree cameras and equipment, fire and homicide analysis, use of other enhancement procedures.

Court room skills including expert witness statements and court room presentations.

Learning Activities

Lectures, Workshops, practicals, mock court room scene, self study.

Notes

This module looks at advanced level crime scene analysis and recent advances in analysis techniques applicable to forensic science such as fingerprints. It extends the basic statistical concepts and methods previously introduced to the level required by the professional forensic scientist. Skills developed during this module include: analysing and solving problems, teamwork, initiative, creativity, written and oral

communication, numerical reasoning, personal planning and organisation, information and communication technology, as well as subject-specific skills. A number of developing forensic science areas will be discussed in relation to the current literature.