

Interpretation and Presentation of Forensic Evidence for Forensic Science

Module Code:	ARC6024-B
Academic Year:	2018-19
Credit Rating:	20
School:	School of Archaeological and Forensic Sciences
Subject Area:	Forensic Science
FHEQ Level:	FHEQ Level 6
Module Leader:	Dr Andrew Wilson

Additional Tutors:

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	12
Tutorials	14
Laboratory	24
Directed Study	150

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Academic Year (Sept - May)

Module Aims

To develop skills in the interpretation of forensic evidence (in the context of case circumstances) for a variety of physical evidence types and an appreciation of arguments used to weaken or strengthen conclusions. To inform debate in the interpretation of statistical and non-statistical forensic evidence. To introduce Bayesian statistics to the

evaluation of forensic evidence. To develop an appreciation of the requirements of the English courts on experts (specifically the role of expert witnesses (criminal procedure rules 2015), quality management systems, and the effect of Daubert in the US. To develop understanding of the regulation of forensic practice including the Home Office forensic science regulator and ISO 17020 and ISO 17025). To provide experience of presenting and defending expert opinion.

Outline Syllabus

Sources of Information: Law Commission, Lord Chancellor`s Department, and Legal Services Commission. Courts and Experts: Woolf Report, Auld Report, Daubert, Frye Test; Scientific evidence, junk science. Evidence types: physical evidence, class and individual characteristics. Topics selected from: fibres/ hairs, blood, saliva, sweat, and urine, fingerprints, blood spatter analysis, presumptive tests, DNA, knots.

Analysis of evidence using physical, chemical and instrumental techniques. Bayesian inference and analysis: estimating probability/ likelihood and evidence interpretation, the transposed conditional, type I and II errors. Regulation, standards and the forensic profession; Courtroom presentation skills: case preparation, discipline and procedures, effective communication, evidence in chief, cross-examination, aims of counsel, defence tactics. Courtroom questioning.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Define the roles, duties and privileges of the expert in the courtroom with reference to legislation and recommendations of legal bodies.
- 2 Describe differences between statistical (Bayesian and classical) and non-statistical forensic evidence for a variety of common forensic evidence types.
- 3 Interpret forensic evidence in the context of case circumstances, formulate and defend a balanced opinion, and critically assess an expert report and identify when scientific method has and has not been applied in the interpretation of forensic evidence within it.
- 4 Write comprehensive, comprehensible, rational and impartial reports.
- 5 Use communication skills in presenting and defending expert testimony under challenging conditions whilst giving Evidence-in-Chief and in Cross-Examination.
- 6 Understand the function and practice of quality assurance.

Learning, Teaching and Assessment Strategy

Lectures, supported by practical assessment and interpretation of evidence types and individual oral presentation.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Coursework	Group-based forensic strategy document, semester 1 (1000 words per group)	0-1000 words	10%	No
Summative	Coursework	An expert witness report on physical evidence, semester 2	0-3000 words	60%	No
Summative	Coursework	Oral cross examination, semester 2	15 minutes	30%	Yes

Legacy Code (if applicable)

Reading List

To view Reading List, please go to [rebus:list](#).