

Summary Information

Module Code	5103FSBMOL
Formal Module Title	Analytical Forensic Science
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Jon Ashley	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Jason Birkett	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	16
Tutorial	5
Workshop	12

Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	The aims of this module are to build on the theory, and provide further practical experience of the forensic analytical techniques taught in the forensic chemistry module at level 4. In addition to this, the module aims to provide students with more experience of interpreting different types of chromatograms and spectra and further analytical chemistry knowledge to provide background information for the chemistry based modules offered at level 6.
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Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Apply theoretical and practical knowledge of analytical forensic techniques to the analysis of a range of materials with reference to forensic science
MLO2	Interpret and analyse analytical data sets
MLO3	Develop scientific report writing and subject specific professional skills

Module Content

Outline Syllabus
Calibration Methods and Quality Control Sampling and Sample Preparation Quantitative and Qualitative Analysis using Chromatographic Techniques (GC and HPLC) Mass Spectrometry Raman and Nuclear Magnetic Resonance Spectroscopy Scientific Report Writing Interpretation of Spectra and Chromatograms

Module Overview

The aims of this module are to build on the theory, and provide further practical experience of the forensic analytical techniques taught in the forensic chemistry module at level 4. In addition to this, the module aims to provide more experience of interpreting different types of chromatograms and spectra and further analytical chemistry knowledge to provide background information for the chemistry based modules offered at level 6.

Additional Information

Analytical forensic science is a 20 credit semester 2 module, which provides students with further information about forensic analytical chemistry, and further practical experience of forensic analytical techniques used in forensic laboratories. This module will also provide students with underpinning theory and practical experience of forensic analytical techniques to aid study at level 6.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Centralised Exam	Exam	50	2	MLO2, MLO1
Report	Report	50	0	MLO2, MLO1, MLO3