

Liverpool John Moores University

Title: FORENSIC CHEMISTRY
Status: Definitive
Code: **4103FSBMOL** (122126)
Version Start Date: 01-08-2021

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

Team	Leader
Amanda Boddis	Y
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Academic Level: FHEQ4
Credit Value: 20
Total Delivered Hours: 69
Total Learning Hours: 200
Private Study: 131

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	20
Off Site	8
Practical	30
Workshop	9

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Exam	50	2
Report	Report	Scientific Report	50	

Aims

To provide a basic knowledge of chemistry and chemical analysis important in forensic science. This course aims to provide core material in chemistry relevant to forensic analysis and sufficient for higher level study of this subject.

Learning Outcomes

After completing the module the student should be able to:

- 1 Perform a range of chemical tests and analyse the results obtained
- 2 Discuss the use of forensic chemical tests within forensic analysis
- 3 Demonstrate a knowledge of the chemistry underpinning forensic chemical analysis

Learning Outcomes of Assessments

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

Examination	2	3	
Report	1	2	3

Outline Syllabus

Basic Fundamentals of forensic chemistry
Basic Chemical Analysis (Colour Tests and physical measurements)
Polarity and Partitioning (including Liquid -Solid and Liquid-Liquid Extraction)
Basic Chromatography
Chemistry of Colour (Dyes and pigments, Colour systems, Inks and Paints)
Forensic Techniques for the detection of Heavy Metals (Atomic Spectrometry)
Chemistry of Combustion and Explosives
Introduction to Spectroscopic Techniques
Drug Analysis

Learning Activities

Lectures with activities, workshops and practical sessions including Off site trip to Bootle

Notes

Forensic Chemistry is a 20 credit semester 1 module, which provides students with information about the different types of evidence a forensic chemist would analyse. Including the chemistry underpinning the different types of evidence and both theoretical and practical experience of the forensic techniques used to analyse this evidence.