

Liverpool John Moores University

Title: FORENSIC BIOSCIENCE
Status: Definitive
Code: **7105PSCPD** (125066)
Version Start Date: 01-08-2021

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

Team	Leader
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Academic Level: FHEQ7
Credit Value: 20
Total Delivered Hours: 40
Total Learning Hours: 200
Private Study: 160

Delivery Options

Course typically offered: S1 & S2 & Summer

Component	Contact Hours
Lecture	12
Practical	12
Seminar	2
Tutorial	4
Workshop	10

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	Portfolio	Case notes and laboratory findings from the practical classes (2500 words)	50	
Presentation	Seminar	Seminar presentation based on case study and /or recent publications	50	

Aims

This CPD award aims to allow students to critically appraise the use and analysis of biological material within a forensic context and to demonstrate their understanding of the importance and limitations of such analysis. Students should develop an ability to perform a wide range of laboratory investigations pertinent to this area of study, interpret the results and be able to review current literature in the area, discuss limitations of a range of case studies and suggest newer and/ or more appropriate methods of investigation.

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply and adapt problem solving skills to unfamiliar and complex situations relevant to forensic bioscience
- 2 Critically evaluate established and developing techniques in forensic bioscience
- 3 Record, interpret and evaluate biological data in a manner appropriate for forensic science.

Learning Outcomes of Assessments

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

2500 word Laboratory portfolio	2	3
Seminar presentation	1	2

Outline Syllabus

*Forensic microbiology including for example, bioterrorism, the role of microorganisms in decomposition and analysis of personal microbiota
The role of the pathologist and the medicolegal autopsy including auxillary roles and analysis such as histology
Forensic entomology - for example post mortem interval determination, entotoxicology
Diagnosis of drowning - use of diatoms and cyanobacteria
Pollen analysis
Use of techniques such as stable isotope analysis*

Learning Activities

Lectures, seminars, tutorials and practical sessions including attendance at an autopsy.

One of the key themes running through this module will be the development of the skills and knowledge to link theory and professional practice.

The module will utilise blended learning techniques, combining traditional teaching strategies with immersive learning and some e-learning.

Students will be encouraged to monitor their own learning in this module, supported by an experienced and knowledgeable mentor, through their Personal Development Plans.

Sessions will incorporate lectures, workshops, tutorials and practical sessions delivered by staff from LCAPS working alongside teaching staff from the university School of Forensic Science, Pharmacy and Biomolecular Sciences, supported by Visiting Lecturers.

Students will be expected to engage in self directed and supported learning to develop their knowledge and the practical application of it. Any issues raised during lectures can be further explored during plenary sessions, within smaller groups, with their allocated mentor and/or the module team.

Notes

Programme code: 35939

There are no professional body requirements at present. Developments of the College of Policing are constantly monitored and incorporated, where appropriate.

Benchmark Statement:

There are no subject benchmarks for police studies but cognisance has been taken of the evolving police professionalisation agenda and where applicable the requirements of the College of Policing, together with appropriate National Occupational Standards for policing set out by Skills for Justice, the Benchmark Statements for Criminology and other QAA Benchmark Statements when appropriate.

Mode and Duration of Study:

This CPD module will be offered on a part time basis and through delivery on-site (at LJMU) or through a blended delivery process incorporating some distance learning. However, and of note, this module is not available entirely off-site (UK or overseas) owing to some of the practical elements of its content. Delivery will be supported by the Virtual Learning Environment, Canvas.

Whilst the intake month is flexible, with the module being able to commence in semester 1, semester 2 or the summer period, the duration of study will usually be across 18 weeks, with scope to negotiate with a student or their employing organisation for shorter or longer periods.

Criteria for admission:

The entry requirement is a first degree at 2:2 or above, international equivalent or through RPEL.

This CPD programme is open to recruitment for Police Officers or Police Staff. The content of the programme is also of relevance to individuals working in other law enforcement agencies who have investigation, incorporating the examination of scenes and forensic awareness, as a key element of their work processes (e.g. the NCA, DWP and H&S Executive).

Name of final award:
Certificate of Professional Development - Forensic Bioscience

Student Support:

The University aims to provide students with access to appropriate and timely information, support and guidance to ensure that they are able to benefit fully from their time at LJMU. All students are assigned a Personal Tutor to provide academic support and when necessary signpost students to the appropriate University support services.

Students are able to access a range of professional services including:
Advice on practical aspects of study and how to use these opportunities to support and enhance their personal and academic development. This includes support for placements and careers guidance.

Student Advice and Wellbeing Services provide students with advice, support and information, particularly in the areas of: student funding and financial matters, disability, advice and support to international students, study support, accommodation, health, wellbeing and counselling.

Students studying for an LJMU award at a partner organisation will have access to local support services.

Assessment Regulations:

All programmes leading to LJMU awards operate within the University's Academic Framework. <https://www.ljmu.ac.uk/about-us/public-information/academicqualityandregulations/academic-framework>

Compulsory attendance requirements:

Students should attend all taught sessions in line with the University's Attendance Policy.

This course was written in 2018.

Methods for Evaluating and Improving Quality:

All programmes leading to LJMU awards have been designed and approved in accordance with the UK Quality Code for Higher Education, including the Framework for Higher Education Qualifications in the UK (FHEQ) and subject benchmark statements where applicable. The University is subject to periodic review of its quality and standards by the Quality Assurance Agency (QAA) Published review reports are available on the QAA website at www.qaa.ac.uk
Programmes which are professionally accredited are reviewed by professional, statutory and regulatory bodies (PSRBs) and such programmes must meet the competencies/standards of those PSRBs.

The University uses the results of student feedback from internal and external student surveys (such as module evaluations, the NSS and PTES), module evaluation questionnaires and meetings with student representatives to improve the quality of programmes.

The quality of teaching is assured through staff review and staff development in learning, teaching and assessment.

All programmes are reviewed annually and periodically, informed by a range of data and feedback, to ensure quality and standards of programmes and to make improvements to programmes.

The University is maintaining the threshold academic standards set for awards in accordance with the FHEQ and applicable subject benchmark statements. The assessment process measures student achievement rigorously and fairly against the intended outcomes of the programme(s) and is conducted in line with University policies and regulations. The academic standards are comparable with those in other UK higher education institutions of which external examiners have experience.

Alignment for CME:

MSc Advanced Policing (35837) - the same existing arrangements for the full programmes delivered by Science and LCAPS will be used.

Alignment to external examining:

MSc Advanced Policing (35837) - This CPD module will be covered by the same External Examiner.