

#### Summary Information

Module Code	7105FSBMOL
Formal Module Title	Forensic Bioscience
Owning School	Pharmacy & Biomolecular Sciences
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

#### Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

#### Learning Methods

Learning Method Type	Hours
Lecture	16
Practical	12
Seminar	3
Workshop	9

#### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

#### Aims and Outcomes

Aims	The aims of this module are to allow students to critically appraise the use and analysis of biological material within a forensic context, demonstrating an understanding of the importance and limitations of such analysis. They should be able to perform a wide range of laboratory investigations pertinent to this area of study and interpret the results in a timely and appropriate fashion. Additionally, students should be able to review current literature in the area and discuss the limitations of a range of case studies, suggesting newer and/ or more appropriate methods of investigation.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Apply and adapt problem solving skills to unfamiliar and complex situations relevant to forensic bioscience
MLO2	2	Critically evaluate established and developing techniques in forensic bioscience
MLO3	3	Record, interpret and evaluate biological data in a manner appropriate for forensic science.

### Module Content

Outline Syllabus	A range of topics will be discussed and covered. These will reflect areas of on ongoing research within forensic bioscience and the specialisms of staff members. Areas will include aspects of the following:Forensic microbiology including for example, microbial analysis of soils, bioterrorism, the role of micro-organisms in decomposition and analysis of personal microbiotaForensic entomology - for example the range of organisms under analysis, post mortem interval determination, endotoxicologyDiagnosis of drowning and other pathological analysisOther methods for post mortem interval determinationuse of protein analysis in forensic bioscienceBlood pattern analysis and its usesUse of techniques such as stable isotope analysisBasic methods of identification
Module Overview	This module combines theory and practical work in post mortem interval determination, entomology, microbiology and pathology.
Additional Information	Advanced level study of the use of bio-organisms in a legal context such as understanding and identifying microorganisms used in bioterrorism or entomology uses including PMI determination. Information relating to decomposition and related pathology based techniques will be introduced.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Essay	Laboratory portfolio	50	0	MLO2, MLO3
Practice	Seminar presentation	50	0	MLO1, MLO2

### Module Contacts

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Komang Ralebitso Senior	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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