

## MODULE DESCRIPTOR

### Module Title

Forensic Practice - Forensic Biology

Reference	PL2661	Version	1
Created	August 2023	SCQF Level	SCQF 8
Approved	December 2023	SCQF Points	15
Amended	September 2017	ECTS Points	7.5

### Aims of Module

To provide students with the knowledge and skills to carry out and evaluate laboratory work involving forensic biology techniques.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Demonstrate knowledge of the basic structure, functions, and growth of different cells and tissues.
- 2 Appreciate the principles of genetic inheritance in genetic investigations and gene screening.
- 3 Explain the theoretical basis underlying forensic tests used in the examination of a range of biological materials.
- 4 Appreciate practical applications of forensic biology tests in the recovery of biological evidence.

### Indicative Module Content

Structure and function of different cell types and their organelles. Theory underlying modern forensic examination techniques used to analyse evidential information. The scientific basis for tests for body samples (blood, semen, faeces, saliva and squamous epithelia) in terms of their biological properties, persistence and the techniques that can be used to extract relevant biological information from them. Practical application of a range of biological tests. Assessment of significance of evidence. Presentation of evidence.

### Module Delivery

This module uses a blended delivery with lectures supplemented by tutorials and practical laboratory classes.

**Indicative Student Workload**

	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**ASSESSMENT PLAN**

If a major/minor model is used and box is ticked, % weightings below are indicative only.

**Component 1**

Type: Examination Weighting: 100% Outcomes Assessed: 1, 2, 3, 4  
 Description: Closed book written examination.

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

This module is assessed using the one component of assessment as detailed in the Assessment Plan. To pass this module, candidates must achieve a Module Grade D or better.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	A
<b>B</b>	B
<b>C</b>	C
<b>D</b>	D
<b>E</b>	E
<b>F</b>	F
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module None, in addition to SCQF level 8 entry requirements.  
 Corequisites for module None.  
 Precluded Modules None.

**ADDITIONAL NOTES**

This module is taught exclusively by Forensics.

**INDICATIVE BIBLIOGRAPHY**

- 1 JAMES, S.H., KISH, P.E. and SUTTON, T.P., 2021, *Principles of Bloodstain Pattern Analysis: Theory and Analysis*. 1st Edition. CRC Press.
- 2 JAMES, S.H. and NORDBY, J.J., 2015, *Forensic Science: An Introduction to Scientific and Investigative Techniques*. 4th Edition. CRC Press
- 3 REED, R.H., HOLMES, D., WEYERS, J., JONES, A., 2021, *Practical Skills in Biomolecular Sciences*. 6th Edition. Pearson Education Ltd.
- 4 WONDER, A.Y., 2007, *Bloodstain Pattern Evidence: Objective Approaches and Case Applications*. 1st Edition. Academic Press.
- 5 LANGFORD, A., DEAN, J.R., REED, R., HOLMES, D., WEYERS, J. and JONES, A., 2018, *Practical Skills in Forensic Science*. 3rd Edition. Pearson Education Ltd.