

Module Title Forensic Biology	Reference AS2011 SCQF Level SCQF 8 SCQF Points 15 ECTS Points 7.5 Created June 2002 Approved June 2002 Amended May 2011 Version No. 4
Keywords Forensic Biology, Biological Materials, Blood Spatter Patterns, Palynology, Entomology	

This Version is No Longer Current

The latest version of this module is available [here](#)

Prerequisites for Module

Analytical Techniques for Life Sciences (AS1802) or equivalent

Corequisite Modules

None.

Precluded Modules

None.

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

Indicative Student Workload

<i>Contact Hours</i>	Full Time
Laboratory Work	12
Lectures/Case Studies	24
<i>Private Study</i>	
Directed Study	44
Private Study	70

Mode of Delivery

This module is delivered by formal lectures supplemented by tutorials and practical work.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1,2,3,4

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

- 1.Explain the theoretical basis underlying forensic tests used in the examination of a range of biological materials.
- 2.Appreciate practical applications of forensic biology tests.
- 3.Interpret example bloodstain patterns in a scientific manner.
- 4.Demonstrate knowledge of the recovery of biological evidence.

Indicative Module Content

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 forensic tests.

Assessment of significance of evidence. Presentation of evidence. Bloodstain Pattern Interpretation. Physical Properties of Blood Mechanisms of Spatter Formation. Steps to determine the origin of a spatter

The module is assessed by a closed book examination.

Indicative Bibliography

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

pattern. Insect life cycles.
Entomological evidence in
forensic cases. Pollen, spores,
algae and plant materials as
evidence.