

## MODULE DESCRIPTOR

### Module Title

Forensic Biology and Anthropology

Reference	AS3240	Version	3
Created	April 2023	SCQF Level	SCQF 9
Approved	March 2018	SCQF Points	15
Amended	September 2023	ECTS Points	7.5

### Aims of Module

To provide students with the knowledge and skills to analyse biological evidence and skeletal remains using biological laboratory techniques employed in forensic science.

### Learning Outcomes for Module

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

- 1 Discuss the theoretical basis and practical applications of forensic tests used in the examination of a range of biological materials.
- 2 Evaluate the suitable methods used to recover biological evidence and skeletal remains.
- 3 Discuss the biological profiling of skeletal remains using anthropological techniques.
- 4 Evaluate the role of biological forensics and anthropology in forensic investigations and legal proceedings.

### Indicative Module Content

Recovery scene methods; forensic examination methods; analysis of body samples (blood; semen; faeces; saliva; epithelia); bloodstain pattern analysis; determination of origin of spatter pattern; entomological evidence and its application; pollen, spores, algae and plant material as evidence; biological profiling of skeletal remains (age; sex; ancestry; height; medical and dental history); DNA profiling; evidence of trauma on skeletal remains (projectile; blunt; sharp; miscellaneous); estimation of post-mortem period and determination of post-mortem events; forensic examination of mass graves.

### Module Delivery

This is a lecture based module supplemented with tutorials and practical laboratory classes.

Module Ref:

AS3240 v3

**Indicative Student Workload**

Contact Hours

Full Time

42

Part Time

N/A

Non-Contact Hours

108

N/A

Placement/Work-Based Learning Experience [Notional] Hours

N/A

N/A

TOTAL

150

N/A

*Actual Placement hours for professional, statutory or regulatory body***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**

Component 1 (Examination) comprises 100%. A minimum of a Grade D is required to pass the module.

Module Grade

Minimum Requirements to achieve Module Grade:

**A**

A

**B**

B

**C**

C

**D**

D

**E**

E

**F**

F

**NS**

Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module

Successful completion of stage 2 of Forensic and Analytical Science or equivalent.

Corequisites for module

None.

Precluded Modules

None.

**INDICATIVE BIBLIOGRAPHY**

- 1 BYERS, S.N. *Introduction to Forensic Anthropology*. Current Edition. Routledge; Abingdon
- 2 JAMES, S.H., KISH, P.E. and SUTTON, T.P. *Principles of Bloodstain Pattern Analysis: Theory and Practice*. Current Edition. CRC Press: Boca Raton
- 3 JAMES, S.H., NORDBY, J.J. and BELL, S. *Forensic Science: An Introduction to Scientific and Investigative Techniques*. Current Edition. CRC Press: Boca Raton.
- 4 LI, R. *Forensic Biology*. Current Edition. CRC Press: Boca Raton.
- 5 LANGFORD, A.M., DEAN, J.R., REED, R., HOLMES, D. A., WEYERS, J. and JONES, A. *Practical Skills in Forensic Science*. Current Edition. Prentice Hall; New Jersey.
- 6 WONDER, A.Y. *Bloodstain Patterns: Identification, Interpretation and Application*. Current Edition. Academic Press: Cambridge, Massachusetts.