

Session: 2022/23

Last modified: 29/03/2022 12:43:24

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| Title of Module: Advancements in Forensic Biology | | | |
| Code: BIOL10028 | SCQF Level: 10 (Scottish Credit and Qualifications Framework) | Credit Points: 20 | ECTS: 10 (European Credit Transfer Scheme) |
| School: | School of Health and Life Sciences | | |
| Module Co-ordinator: | David Thompson | | |
| Summary of Module | | | |
| <p>This module builds upon the student's existing knowledge and understanding of forensic science and focusses on techniques used to currently evaluate biological evidence. This module will be delivered by a range of internal and external speakers and topics may include;</p> <ul style="list-style-type: none"> • Analysis of the human genome in forensic science • Anthropology • Pathology • Bias and Reasoning • Toxicology • Botany • Entomology <p>This module will provide opportunities to develop the following UWS graduate attributes: Critical Thinker, Collaborative, Problem Solver, Effective Communicator.</p> | | | |

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| Module Delivery Method | | | | | |
| Face-To-Face | Blended | Fully Online | HybridC | HybridO | Work-based Learning |
| | | | ✓ | | |
| <p>Face-To-Face Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.</p> <p>Blended A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations</p> <p>Fully Online Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.</p> <p>HybridC Online with mandatory face-to-face learning on Campus</p> <p>HybridO Online with optional face-to-face learning on Campus</p> <p>Work-based Learning Learning activities where the main location for the learning experience is in the workplace.</p> | | | | | |

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| Campus(es) for Module Delivery | | | | | | |
| The module will normally be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) | | | | | | |
| Paisley: | Ayr: | Dumfries: | Lanarkshire: | London: | Distance/Online Learning: | Other: |

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| | | | ✓ | | | |
| Term(s) for Module Delivery | | | | | | |
| (Provided viable student numbers permit). | | | | | | |
| Term 1 | ✓ | Term 2 | | Term 3 | | |

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| Learning Outcomes: (maximum of 5 statements) | | | | | |
| <p>On successful completion of this module the student will be able to:</p> <p>L1. Critically apply knowledge of current techniques in forensic biology for the interpretation of results within the context of a criminal investigation.</p> <p>L2. Demonstrate detailed knowledge of the scientific basis and utilisation of forensic biological techniques.</p> <p>L3. Critically evaluate the use of advanced DNA analysis techniques.</p> <p>L4. Critically analyse bias in forensic science.</p> | | | | | |
| Employability Skills and Personal Development Planning (PDP) Skills | | | | | |
| SCQF Headings | During completion of this module, there will be an opportunity to achieve core skills in: | | | | |
| Knowledge and Understanding (K and U) | SCQF Level 10. Critical analysis and understanding of the biology that underpins forensic science. | | | | |
| Practice: Applied Knowledge and Understanding | SCQF Level 10. The application of knowledge and understanding gained will be applied in forensic biology. Students should be able to critically evaluate the techniques and our understanding of the science important in forensic biology | | | | |
| Generic Cognitive skills | SCQF Level 10. Critically evaluate scientific data making judgements on the validity and interpretation of the data | | | | |
| Communication, ICT and Numeracy Skills | SCQF Level 10. Use oral and written communication techniques that would be expected in employment. Use of software in communication. Critically evaluate material found in databases and other sources. | | | | |
| Autonomy, Accountability and Working with others | SCQF Level 10. Show a professional approach to assessing ones own learning needs and studying independently | | | | |
| Pre-requisites: | Before undertaking this module the student should have undertaken the following: | | | | |
| | <table border="1"> <tr> <td>Module Code: BIOL08026 BIOL09015</td> <td>Module Title: Forensic Evidence- Analysis and Retrieval Forensic Analytical Techniques</td> </tr> <tr> <td>Other:</td> <td></td> </tr> </table> | Module Code: BIOL08026 BIOL09015 | Module Title: Forensic Evidence- Analysis and Retrieval Forensic Analytical Techniques | Other: | |
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| Other: | | | | | |
| | | | | | |
| Co-requisites | <table border="1"> <tr> <td>Module Code:</td> <td>Module Title:</td> </tr> </table> | Module Code: | Module Title: | | |
| Module Code: | Module Title: | | | | |

* Indicates that module descriptor is not published

| Learning and Teaching | |
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| <p>This module covers a wide variety of theoretical, conceptual and practical areas, which require a range of knowledge and skills at a more advanced level to be displayed and exercised. Delivery of its syllabus content will use a range of internal and external experts and include formal lectures and structured tutorials (working closely integrated with the lecture material). The completion and submission of written coursework will make use of appropriate forms of IT and VLE, and independent study.</p> | |
| <p>Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:</p> | <p>Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)</p> |
| Lecture/Core Content Delivery | 24 |
| Tutorial/Synchronous Support Activity | 12 |
| Independent Study | 164 |
| | 200 Hours Total |
| **Indicative Resources: (eg. Core text, journals, internet access) | |
| <p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Flesh and Bone: An Introduction to Forensic Anthropology. Nafté M., Carolina Academic Press, ISBN:0890896380</p> <p>Essential Forensic Biology 3rd Edition (2019), Gunn; Wiley ISBN-10: 1119141400</p> <p>Forensic Science – Jackson A.R. & Jackson J., Prentice Hall, ISBN: 130432512</p> <p>Additional resources will be made available using the module's VLE page.</p> | |
| <p>(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)</p> | |
| Engagement Requirements | |
| <p>In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: Academic engagement procedure</p> <p>Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here: Attendance at synchronous sessions (lectures, workshops and tutorials), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.</p> | |

Supplemental Information

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| Programme Board | Biological Sciences and Health |
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| Assessment Results (Pass/Fail) | No |
| Subject Panel | Biology L7-11 |
| Moderator | Gail McGarvie |
| External Examiner | A Tsaousis |
| Accreditation Details | This module is part of the BSc (Hons) Applied Bioscience with Forensic Investigation programme; accredited by Royal Society of Biology (RSB) |
| Version Number | 1 |

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| Assessment: (also refer to Assessment Outcomes Grids below) |
| Cold Case Review -60% |
| Expert witness video presentation -40% |
| (N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Handbook.) |

Assessment Outcome Grids (Footnote A.)

| Component 1 | | | | | | | |
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| Assessment Type (Footnote B.) | Learning Outcome (1) | Learning Outcome (2) | Learning Outcome (3) | Learning Outcome (4) | Weighting (%) of Assessment Element | Timetabled Contact Hours | |
| Case study | ✓ | ✓ | ✓ | | 60 | 0 | |
| Component 2 | | | | | | | |
| Assessment Type (Footnote B.) | Learning Outcome (1) | Learning Outcome (2) | Learning Outcome (3) | Learning Outcome (4) | Weighting (%) of Assessment Element | Timetabled Contact Hours | |
| Presentation | | ✓ | | ✓ | 40 | 0 | |
| Combined Total For All Components | | | | | 100% | 0 hours | |

Footnotes

- A. Referred to within Assessment Section above
 B. Identified in the Learning Outcome Section

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| Note(s): |
| 1. More than one assessment method can be used to assess individual learning outcomes. |

2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).
This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

Equality and Diversity

In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.

[UWS Equality and Diversity Policy](#)

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)