

# Faculty of Science and Technology AAFS Framework

# Framework/Programme Specification

BSc (Hons) Anthropology

BA (Hons) Archaeology and Anthropology

BSc (Hons) Archaeology

BSc (Hons) Archaeological, Anthropological and Forensic

Sciences

BSc (Hons) Forensic Biology

BSc (Hons) Forensic Investigation

BSc (Hons) Forensic Science

MSc Bioarchaeology

MSc Archaeology (Closed)

MSc Biological Anthropology (Closed)

MSc Forensic Archaeology (Closed)

MSc Forensic Toxicology by Research (Closed)

MSc Maritime Archaeology (Closed)

MSc Forensic Anthropology (Closed)

MSc Osteoarchaeology (Closed)

May 2021

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Faculty of Science and Technology Bournemouth University Poole Dorset BH12 5BB

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# **BASIC FRAMEWORK / PROGRAMME DATA**

Originating institution(s)	Bournemouth University
Award(s) and title(s)	BSc (Hons) Anthropology
7 111 21 21 (3) 21 12 1113 (3)	BA (Hons) Archaeology and Anthropology
	BSc (Hons) Archaeology
	BSc (Hons) Archaeological, Anthropological and Forensic Sciences
	BSc (Hons) Forensic Biology
	BSc (Hons) Forensic Investigation
	BSc (Hons) Forensic Science
	MSc Archaeology
	MSc Bioarchaeology
	MSc Biological Anthropology
	MSc Forensic Archaeology
	MSc Forensic Toxicology by Research
	MSc Maritime Archeology
	MSc Forensic Anthropology
	MSc Osteoarchaeology
UCAS Programme Code(s) (where	BSc (Hons ) Anthropology J21B
applicable and if known)	BA (Hons) Archaeology and Anthropology VL46
,	BSc (Hons) Archaeology F400
	BSc (Hons) Archaeological, Anthropological and Forensic Sciences
	(VF44)
	BSc (Hons) Forensic Biology F3B7
	BSc( Hons) Forensic Investigation F401
	BSc (Hons) Forensic Science F413
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HESA JACS (Joint Academic Coding	BSc (Hons) Anthropology L600
System) Code(s) per programme/pathway	BA (Hons) Archaeology and Anthropology V400,L600 BSc (Hons) Archaeology V400
programme/pathway	BSc (Hons) Archaeological, Anthropological and Forensic Sciences.
	F400
	BSc (Hons) Forensic Biology F400,C110
	BSc (Hons) Forensic InvestigationF410
	BSc (Hons) Forensic Science F410
	MSc Bioarcheology L620, V400
	Closed
	MSc Archaeology V400
	MSc Biological Anthropology L620 MSc Forensic Archaeology F400
	MSc Forensic Toxicology by Research F400, B222
	MSc Maritime Archeology V400
	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400
External reference points(s)	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400  The UK Quality Code for Higher Education;
External reference points(s)	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400  The UK Quality Code for Higher Education; arQAA benchmarks in
External reference points(s)	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400  The UK Quality Code for Higher Education; arQAA benchmarks in Anthropology (2015)
External reference points(s)	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400  The UK Quality Code for Higher Education; arQAA benchmarks in Anthropology (2015) Archaeology (2014)
External reference points(s)	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400  The UK Quality Code for Higher Education; arQAA benchmarks in Anthropology (2015) Archaeology (2014) Biomedical Sciences (2007)
External reference points(s)	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400  The UK Quality Code for Higher Education;  arQAA benchmarks in  Anthropology (2015)  Archaeology (2014)  Biomedical Sciences (2007)  Biosciences(2007)
External reference points(s)	MSc Maritime Archeology V400 MSc Forensic Anthropology F400, L620 MSc Osteoarchaeology L620, V400  The UK Quality Code for Higher Education; arQAA benchmarks in Anthropology (2015) Archaeology (2014) Biomedical Sciences (2007)

Professional, Statutory and Regulatory Body (PSRB) links	Chartered Institute for Archaeologists ( <a href="http://www.archaeologists.net/">http://www.archaeologists.net/</a> )								
	The Following programmes have been fully accredited by the Chartered Institute for Archaeologists:								
	<ul> <li>BSc (Hons) Archaeology</li> <li>BA (Hons) Archaeology</li> <li>BSC (Hons) Archaeological, Anthropological and Forensic Sciences*</li> <li>BA (Hons) Archaeology and Anthropology</li> </ul>								
	* titled BSc (Hons) Archaeological and Forensic Sciences prior to 2019/20 entry								
	Chartered Society of Forensic Science ( <a href="http://www.csofs.org/">http://www.csofs.org/</a> ) Chartered Society of Forensic Science ( <a href="http://www.csofs.org/">http://www.csofs.org/</a> )								
	The Following programmes have been reviewed by the Chartered Society of Forensic Science and:								
	Accreditation has been awarded to:								
	And Recognition has been awarded to								
Place(s) of delivery	Bournemouth University, Talbot Campus								
Mode(s) of delivery	Full-time / Full-time sandwich / Part-time/ CPD								
Credit structure	Standard Credit Structure for Undergraduate and Postgraduate Programmes								
	Level 4 120 Credits (60 ECTS) Level 6 120 Credits (60 ECTS) Level 6 120 Credits (60 ECTS) Level 7 180 Credits (90 ECTS) Level 7 CPD 20 Credits (10 ECTS)								
Duration	3 or 4 years Undergraduate 1 year Postgraduate								

Date of original approval(s)	
	BSc (Hons) Archaeology Approval: 1991; Reviewed 2013 BA (Hons) Archaeology and Anthropology Approval: 2013 BSc (Hons) Forensic Science Approval: 2008; Reviewed: 2013 BSc (Hons) Forensic Investigation Approval: 2011; Reviewed: 2013 MSc Archaeology (formerly MSc Archaeological Practice) MSc Biological Anthropology Approval: 2000; Reviewed: 2011 MSc Forensic Archaeology Approval: 1996; Reviewed: 2011 MSc Forensic Anthropology (formerly MSc Forensic Osteology) Approval: 2008; Reviewed: 2011 MSc Forensic Toxicology by Research Approval: 2008; Reviewed: 2011 MSc Maritime Archaeology Approval: 2008; Reviewed: 2011 MSc Osteoarchaeology Approval: 1998; Reviewed: 2011 Review for Closure
	BA (Hons) Prehistoric and Roman Archaeology Approval: 2004; Review: 2013 BSc (Hons) Archaeological, Anthropological and Forensic Sciences Approval: 2004; Reviewed: 2013;
	BSc (Hons) Anthropology (starting date September 2015) BSc (Hons) Forensic Biology (starting date September 2015) BSc (Hons) Archaeological, Anthropological and Forensic Sciences. (starting date September 2015) MSc Bioarchaeology (starting date September 2015)
Date of first intake	September 2019
Expected start dates	Estimated numbers for first intake (Level 4 for existing and proposed undergraduate and Level 7 for existing and proposed post graduate  BA (Hons) Archaeology and Anthropology (Minimum 12, optimum 25, Maximum 30)  BSc (Hons) Archaeology (Minimum 12, optimum 30, Maximum 45)  BSc (Hons) Archaeological, Anthropological and Forensic Sciences (Minimum 12, optimum 25, Maximum 45)  BSc (Hons) Forensic Biology (Minimum 12, optimum 24, Maximum 30)  BSc (Hons) Forensic Investigation (Minimum 12, optimum 30, Maximum 60)  BSc (Hons) Forensic Science (Minimum 20, optimum 75, Maximum 90)  MSc Archaeology (Minimum 5, optimum 12, Maximum 15)  MSc Bioarcheology (Minimum 10, optimum 12, Maximum 15)  MSc Forensic Archaeology (Minimum 5, optimum 8, Maximum 15)  MSc Forensic Toxicology by Research (Minimum 5, optimum 12, Maximum 15)  MSc Maritime Archeology (Minimum 5, optimum 10, Maximum 15)  MSc Forensic Anthropology (Minimum 5, optimum 10, Maximum 15)  MSc Forensic Anthropology (Minimum 5, optimum 20, Maximum 30)  MSc Osteoarchaeology (Minimum 5, optimum 8, Maximum 12)
Expected start dates	September
Placements	Some UG Programmes have compulsory short placements of five weeks and all UG programmes have the option of a minimum of 30 week placement year
Partner(s) and model(s)	None
Date and version number of this Framework/Programme Specification	May2021, v1.26-0920
Student intake(s)/cohort(s)	September 2020

Unique reference numbers: E1415059-E1415075

FST 1516 01/02/03, approved 19/11/2015. Previously version 1.0 HSS1415 02, approved 13.5.15 previously version 1.2 NM 1516 02, approved 04/11/2015

NM 1516 03, approved 08/12/2015 NM 1516 22, approved 31/8/16

FST1516 16/17/18/19, approved 18/5/16. Previously version 1.4-0916

**BU 1617 01,** approved 24/02/2016. Previously version v1.6-0916

FST 1617 08 (approved 03/02/17) and FST 1617 10 (approved 17/2/17). Previously version 1.7-0917

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FST 1617 13 (approved 17/05/17). Previously version 1.8-0917.
FST 1718 01 (approved 18/09/17). Previously version 1.9-0917.
FST 1718 04, approved 13/10/2017. Previously version 1.10-0917.
NM 1718 03, approved 17/10/17.
FST 1718 07, approved 18/12/17. Previously version 1.11-0917
FST 1718 12, approved 15/01/18. Previously version 1.12-0917
FST 1718 11, approved 17/01/18. Previously version 1.13-0918
FST 1718 13, approved 14/12/17. Previously version 1.14-0918
FST 1718 18, approved 24/01/18. Previously version 1.15-0918
FST 1718 19, approved 27/03/18. Previously version 1.16-0918
FST 1718 22, approved 13/07/18. Previously version 1.17-0918
FST 1718 24, approved 07/02/2018. Previously version 1.18-0918
FST 1819 03, approved 05/12/2018. Previously version 1.19-0919
EC 1819 07, approved 01/02/2019
EC 1819 08, approved 01/02/2019
EC 1819 12, approved 21/02/2019
BU 1819 01, approved 02/07/19
FST 1819 18, approved 23/07/19, Previously 1.20-0919
EC 1819 40, approved 14/08/19
EC 1920 02, approved 05/09/19
FST 1920 04, approved 20/11/19, applied at same time as FST 1920 03
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FST 1920 03, approved 20/11/19, Previously v1.21-0919

FST 1920 07, approved 20/11/19, applied at same time as FST 1920 03

FST 1920 12 approved 21/2/20 Previously v1.23-0920

EC 1920 31, approved 21/2/20.

FST 1920 13, approved 04/03/2020, previously v1.24-0920

FST 2021 10, approved 17/5/21 previously v1.25-0920

#### AIMS OF THE DOCUMENT

This document is to provide the Programme Specifications of programmes offered in the new Framework of the new Department of Archaeology, Anthropology and Forensic Sciences (AAFS).

This required a single Framework for all the UG programmes and another for all the PG Programmes in the old School of Applied Sciences to be fragmented and then re-streamed to produce the two Frameworks to be considered in Spring 2015 one for each of the new Departments (AAFS and the Department of Life and Environmental Sciences LES)

#### The constituent programme of the Framework are as follows

BSc (Hons) Anthropology (new)

BA (Hons) Archaeology and Anthropology

BSc (Hons) Archaeology

BSc (Hons) Archaeological, Anthropological and Forensic Sciences

BSc (Hons) Forensic Biology (new) BSc (Hons) Forensic Investigation

BSc (Hons) Forensic Science

MSc Archaeology (formerly Arch Practice)

MSc Bioarchaeology (new) MSc Biological Anthropology

MSc Forensic Archaeology

MSc Forensic Toxicology by Research

MSc Maritime Archeology

MSc Forensic Anthropology (formerly Forensic Osteology)

MSc Osteoarchaeology

This document will identify programme and learning outcomes for all the programmes within the AAFS framework and to articulate the regulations and governing awards offered within this framework.

#### **PROGRESSION ROUTES**

There are no progression routes applicable to these programmes.

#### AIMS OF THE PROGRAMMES

Each programme that follows will provide information on rationale of outcomes, assessment strategies, learning and teaching methods, information on placements to be offered. Individual programme diagrams showing units offered are included.

The Programme Costing Diagrams and the Programme Skills Matrices are included as appendices.

#### **BSc (Hons) Anthropology** PROGRAMME DIAGRAM **BSc (Hons) Anthropology** Exit qualification: BSc (Hons) Level 6 Anthropology\* **Option units** Sandwich UG programme: Core units Choose 1 of the following: Requires 120 Level 6 credits, (Compulsory) The Science of Human Remains 120 Level 5 credits and 120 Cultural Ecology (20) Level 4 credits and successful Independent Research Anthropology of International completion of a placement year Project (40) Intervention (20) Seekers, Believers and Iconoclasts: Standard UG programme: Sociology of thought(20) Requires 120 Level 6 credits, Choose 2 of the following: 120 Level 5 credits and 120 Animals and Society (20) Level 4 credits Food, culture and travel (20) Primate Behavioural Ecology (20) Level P Optional placement year **Progression** requirements Satisfactory completion of a minimum of 30 weeks of work in industry/business Level 5 **Option units** Core units Choose 2 of the following: **Progression requirements** (Compulsory) Societies of Prehistoric Europe (20) Requires 120 credits at Understanding Cultures (20) Level 5 Rome and Barbarian Europe (20) Themes in Archaeology and Environmental and Societal Challenges Exit qualification: Dip HE Anthropology (20) Anthropology Becoming Human Requires 120 Level 5 Understanding Globalisation (20) (20) Growing up and credits and 120 Level 4 growing old(20) credits Archaeological Science (20 Level 4 Core units (Compulsory) Progression requirements AAFS Study Skills (20) Requires 120 credits at Level Ancient Peoples and Places (20) Introduction to Social Theory (20) Human Anatomy and Physiology (20) Exit qualification: Cert HE Introduction to Social Anthropology (20) Anthropology Studying Ancient Materials (20) Requires 120 Level 4 credits

<sup>\*</sup>Failure of a placement which is specified as a programme exit requirement will require a repeat placement/alternative

#### **ACADEMIC AND PROFESSIONAL CONTEXTS**

This new single-honours programme in BSc (Hons) Anthropology is based on the classic three-field approach, combining biological and social anthropology (and, where appropriate, some elements of archaeology). BU is very well-positioned to deliver a competitive BSc in Anthropology as both subject areas are prominently and broadly represented by staff across the university. As well as the existing links between departments within SciTech (between Archaeology, Anthropology and Forensics, Life Sciences and Psychology) and between SciTech and HSC, the proposed programme draws from expertise housed in the schools of Media and Tourism. The proposal thus aligns with the Faculty's mission to enhance its undergraduate portfolio, and with BU's initiative to expand the academic footprint of the institution into the social sciences and humanities, while promoting strong interdisciplinary, cross-faculty links and collaboration in areas of international recognition and expertise. The programme is also well-placed to support a 3+1 progression model, providing an excellent foundation for further qualification at Level M in a broad range of postgraduate degrees potentially across a range of schools at BU, due to the broad nature of anthropology as an academic discipline.

A blend of established units from across several Faculties will allow BU to deliver the breadth of topics necessary to provide a challenging BSc programme in this extremely broad discipline. Combining elements of the natural and social sciences and humanities in its core focus on understanding the biocultural nature of humans and human societies and human cultural and biological diversity across the globe and through time, the programme plays to the increasing requirements of employers to seek graduates with a broad range of skills in a discipline widely respected for its long and respected academic history. The immediate societal relevance of the discipline's focus on understanding the social interactions, behaviour and material culture that underpins human communities aligns strongly with the University's Fusion agenda and its emphasis on academic endeavour in support of societal needs, while the breadth of the proposed programme provides students with a highly employable mix of specific and transferable skills crossing the arts, humanities and both social and natural sciences.

#### AIMS OF THE PROGRAMME

This undergraduate programme aims to develop in its students the knowledge, understanding, skills and abilities that will allow them to progress to further study or to employment in areas related to the human biological and cultural diversity.

The primary aim of this programme is the development of undergraduates who:

- Appreciate the range of contemporary human social, biological and cultural diversity
- Understand the ways in which humans interact with one another as individuals, groups and social institutions, and with their cultural and physical environments
- Understand and are able to apply the key theories and lines of evidence relating to the investigation of human social, biological and cultural variation and its evolution and change over time
- Appreciate the distinctive features of, and relationships between, biological and social anthropology and their strengths and limitations in relation to other related disciplines
- Can apply the acquired range of skills and knowledge to specific anthropological problems, and also communicate effectively with those working in these professions and with the wider public
- Recognise the global social contexts and politics which impact on work in social and biological anthropology and engage with other cultures, individuals and groups with sensitivity and judgment
- Have the necessary professional knowledge and management skills to develop successful careers in specialist fields of biological and social anthropology

- Have the ability to carry out independent investigations in the area of biological and/or social anthropological practice
- Have the skills and knowledge necessary for postgraduate study
- Have the qualifications to enter professional bodies/practitioner organisations at levels appropriate to their experience.

The degree also aims to provide students with a substantial range of transferable skills in communication, working with people, field and laboratory practice, computing, qualitative and quantitative data analysis, problem-solving, report-writing, critical analysis of information sources, research design and project management. These provide a basis for professional activity and development which may be applicable in other career areas.

#### INTENDED LEARNING OUTCOMES

The programme outcomes cover the relevant academic subjects at honours level and set out

- the expectations including, subject knowledge, understanding and skills of an honours graduate in anthropology
- the teaching, learning and assessment methods employed in their education
- the standards expected of them at the point of graduation.

\*All programme learning outcomes have been written to reflect the QAA benchmark outcome statements (2007) and the Framework for Higher Education Qualifications (FHEQ).

#### **OVERALL PROGRAMME OUTCOMES**

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

#### A. Subject knowledge and understanding - students will be expected to:

- A1. Comprehend the historical development and multidisciplinary nature of social and biological anthropology and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms.
- A2. Contextualise their subject-specific knowledge and understanding within the legal frameworks and professional and ethical guidelines which apply to social and biological anthropological practice.
- A3. Have a sound knowledge of the ecological, social and historical principles explaining the geographic and temporal patterning of biological and cultural diversity in the contemporary world.
- A4. Demonstrate understanding of and ability to apply the major sources of evidence, theories, concepts and principles relevant to the practice of both social and biological anthropology.
- A5. Have a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme.

# B. Intellectual Skills - students will be expected to:

B1. Critically analyse published work in social and biological anthropology and be able to evaluate the merits and limitations of competing explanations of human social,

- cultural and biological diversity.
- B2. Gather, analyse and synthesise information relevant to social and biological anthropological issues.
- B3. Engage in reasoned, critical and articulate discussions of anthropological concepts and theories drawing from a range of appropriate scholarly sources to support hypotheses and interpretations.
- B4. Identify and critically evaluate routine and unfamiliar problems in social and biological anthropological contexts, apply a range of knowledge and skills to develop and implement practical research and solutions, and evaluate their outcomes.
- B5. Plan, execute and report on a piece of original research that demonstrates an understanding of anthropological aims, methods and theoretical considerations.

# C. Subject-specific skills - students will be expected to:

- C1. Identify, select and synthesise a range of lines of evidence relevant to social and/or biological anthropological questions.
- C2. Undertake field, laboratory and desk-based work, selecting and applying safely and ethically appropriate equipment and methods for social and biological anthropological research.
- C3. Plan and carry out investigations into social and biological anthropological questions using an appropriate range of qualitative and/or quantitative data collection and analytical methodologies in a reflective and critical manner.
- C4. Prepare reports and presentations on social/biological anthropological research to professional standard in a range of effective and appropriate formats and for a range of audiences.
- C5. Critically evaluate and develop theories and hypotheses relating to social and/or biological anthropological questions, drawing from appropriate theories and approaches from a range of disciplines.

# D. Transferable skills - students will be expected to:

- D1. Engage in constructive discussion and work in collaboration with others, including staff and students, demonstrating sensitivity to diversity of identity, language, normative and moral positions and professional and organisational differences.
- D2. Communicate their own and others' ideas effectively by oral, written and visual means to a range of different audiences.
- D3. Be familiar with and able to apply a range of problem-solving techniques including the use of qualitative and quantitative data and appropriate IT such as the Web, spread sheets, databases and word processing.
- D4. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered.
- D5. Understand their own strengths and weaknesses in learning and study skills and identify and work towards targets for personal, career, and academic development.
- D6. Be independent, reflective and critical learners and thinkers.

# **Level 4 Outcomes – Cert HE Anthropology**

# A. Subject knowledge and understanding - students will be expected to:

- A1. Be aware of the nature and scope of social and biological anthropology, the differences and similarities between them, and their relationship with some related subjects.
- A2. Demonstrate knowledge of the origins and historical development of the disciplines of social and biological anthropology, its social, cultural and political context and the legal and ethical guidelines pertaining to its practice.
- A3. Show a basic awareness of the range of human cultural, social and biological diversity.
- A4. Show a basic awareness of the key concepts, theories and methods in contemporary social and biological anthropology, and appreciate the role of academic research and practice more broadly.

# B. Intellectual Skills - students will be expected to:

- B1. Identify and utilise appropriate information sources.
- B2. Critically engage with and produce basic interpretations of a variety of sources.
- B3. Construct coherent arguments relating to major contemporary social and biological anthropological themes.
- B4. Recognise and demonstrate an understanding of the fundamentals of a range of techniques, including scientific methods, in the practice of social and biological anthropology and when they may be applied.

# C. Subject specific skills - students will be expected to:

- C1. Recognise the nature and significance of different kinds of evidence central to social and biological anthropology.
- C2. Recognise, observe and describe different classes of primary social and biological anthropological data and report the data appropriately.
- C4. Write appropriately structured reports and make effective oral presentations regarding social/biological anthropological research for a range of different audiences.
- C5. Draw from a range of different theories and approaches from across social and biological anthropology and related disciplines to assess competing interpretations of evidence.

# D. Transferable skills - students will be expected to:

- D1. Engage in constructive discussion and work in collaboration with others, including staff and students, demonstrating sensitivity to diversity of identity, language, normative and moral positions and professional and organisational differences.
- D2. Communicate their own and others' ideas effectively by oral, written and visual means to a range of different audiences.
- D3. Be familiar with and able to apply a range of problem-solving techniques including the use of qualitative and quantitative data and appropriate IT such as the Web, spread sheets, databases and word processing.

- D4. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered.
- D5. Understand their own strengths and weaknesses in learning and study skills and identify and work towards targets for personal, career, and academic development.
- D6. Be independent, reflective and critical learners and thinkers.

# <u>Level 5 Outcomes – DipHE Anthropology</u>

#### A. Subject knowledge and understanding - students will be expected to have:

- A1. An appreciation of the differences between different classes of evidence from social and biological anthropological contexts.
- A2. An understanding of the historical, cultural, and political context of social and biological anthropology, its wider relevance in the contemporary world and the legal and ethical considerations involved in anthropological practice.
- A3. Be familiar with the major principles governing the geographical and temporal patterning of human biological and cultural diversity.
- A4. Understanding of the application of practical methods for collecting and analysing primary data in social and/or biological anthropology, as well as the theoretical bases of and current debates over approaches to interpretation.
- A5. Demonstrated knowledge and understanding of a chosen specialised area (e.g. region or theme) of social and/or biological anthropology.

### B. Intellectual Skills - students will be expected to:

- B1. Marshal and critically appraise other people's arguments
- B2. Evaluate competing arguments in archaeology and social/ biological anthropology and related disciplines.
- B3. Generate hypotheses and produce logical and structured arguments supported by relevant primary and secondary data.
- B4. Exercise informed judgment in selecting and using appropriate methods of data gathering and qualitative and quantitative analysis and assemble coherent research/project designs

# C. Subject-specific skills - students will be expected to

- C1. Draw from a range of appropriate lines of evidence central to social and biological anthropology.
- C2. Practice a variety of appropriate primary data collection techniques safely and ethically.
- C3. Select and apply appropriate qualitative and quantitative techniques to process social and/or biological anthropological data, recognising the potential and limitations of such techniques.
- C4. Prepare written and oral presentations to professional standards for a range of audiences.
- C5. Critically assess hypotheses and interpretations of social and/or biological anthropological evidence in their historical contexts.

# D. Transferable skills: Students will be expected to

- D1. Engage in constructive discussion and work in collaboration and teams with others, for example through fieldwork, debate and/or laboratory or project work, demonstrating sensitivity to diversity of identity, language, normative and moral positions and professional and organisational differences.
- D2. Communicate their own and others' ideas effectively by oral, written and visual means to a range of different audiences.
- D3. Be familiar with and able to apply a range of problem-solving techniques including the use of qualitative and quantitative data and appropriate IT such as the Web, spread sheets, databases and word processing.
- D4. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered, with regard to the importance of safety procedures and ethical guidelines.
- D5. Understand their own strengths and weaknesses in learning and study skills and identify and work towards targets for personal, career, and academic development.
- D6. Be independent, reflective and critical learners and thinkers.

#### Level 6 outcomes - BSc (Hons) Anthropology.

#### A. Subject knowledge and understanding - students will be expected to:

- A1. Understand the historical development and multidisciplinary nature of social and biological anthropology and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms.
- A2. Contextualise their subject-specific knowledge and understanding within the legal frameworks and professional and ethical guidelines which apply to social and biological anthropological practice.
- A3. Have a sound knowledge of the ecological, social and historical principles explaining the geographic and temporal patterning of biological and cultural diversity in the contemporary world.
- A4. Demonstrate understanding of and ability to apply the major sources of evidence, theories, concepts and principles relevant to the practice of both social and biological anthropology.
- A5. Have a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme.

#### B. Intellectual Skills - students will be expected to:

- B1. Critically analyse published work in social and biological anthropology and be able to evaluate the merits and limitations of competing explanations of human social, cultural and biological diversity.
- B2. Gather, analyse and synthesise information relevant to social and biological anthropological issues.
- B3. Engage in reasoned, critical and articulate discussions of anthropological concepts and theories drawing from a range of appropriate scholarly sources to support hypotheses and interpretations.

- B4. Identify and critically evaluate routine and unfamiliar problems in social and biological anthropological contexts, apply a range of knowledge and skills to develop and implement practical research and solutions, and evaluate their outcomes.
- B5. Plan, execute and report on a piece of original research that demonstrates an understanding of anthropological aims, methods and theoretical considerations.

# C. Subject-specific skills - students will be expected to:

- C1. Identify, select and synthesise a range of lines of evidence relevant to social and/or biological anthropological questions.
- C2. Undertake field, laboratory and desk-based work, selecting and applying safely and ethically appropriate equipment and methods for social and biological anthropological research.
- C3. Plan and carry out investigations into social and biological anthropological questions using an appropriate range of qualitative and/or quantitative data collection and analytical methodologies in a reflective and critical manner.
- C4. Prepare reports and presentations on social/biological anthropological research to professional standard in a range of effective and appropriate formats and for a range of audiences.
- C5. Critically evaluate and develop theories and hypotheses relating to social and/or biological anthropological questions, drawing from appropriate theories and approaches from a range of disciplines.

# D. Transferable skills - students will be expected to:

- D1. Engage in constructive discussion and work in collaboration with others, including staff and students, demonstrating sensitivity to diversity of identity, language, normative and moral positions and professional and organisational differences.
- D2. Communicate their own and others' ideas effectively by oral, written and visual means to a range of different audiences.
- D3. Be familiar with and able to apply a range of problem-solving techniques including the use of qualitative and quantitative data and appropriate IT such as the Web, spread sheets, databases and word processing.
- D4. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered.
- D5. Understand their own strengths and weaknesses in learning and study skills and identify and work towards targets for personal, career, and academic development.
- D6. Be independent, reflective and critical learners and thinkers.

# Programme Skills Matrix

	Units	Α	Α	Α	Α	Α	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D	D
			2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6
	Cultural Ecology	Х		Х	Х		Х		Х			Х				Х		Х	Х			Х
	Independent Research Project					Х		Χ	Х		Х	Χ	Х	Χ	Х	Χ	Х	Χ	Χ	Χ	Χ	Х
9	The Science of Human Remains	Х							Х	Х		Χ	Х	Χ	Х	Χ	Х	Χ	Х			Х
	Anthropology of International Intervention	Х	Х	Х	Х		Х		Х			Χ			Х	Χ		Χ	Χ			Х
EVEL	Seekers Believers and Iconoclasts: Sociology of thought	Х		Х	Х		Х	Χ	Х			Χ				Χ		Χ	Χ			Х
=	Animals and Society	Х			Х		Х		Х			Χ		Χ		Χ		Χ	Χ			Х
	Food, Culture and Travel	Х						Χ	Х			Χ				Χ		Χ	Χ			Х
	Primate Behavioural Ecology	Х							Х			Χ				Χ		Χ	Χ			Х
	Themes in Archaeology and Anthropology	Х	Х		Х	Х			Х	Χ		Χ				Χ		Χ	Χ	Χ		
	Becoming Human	Х		Х	Х				Х			Χ				Χ		Χ	Χ			
	Understanding Cultures	Х			Х		Х	Х	Х			Х				Х	Х	Χ	Х			
L 5	Archaeological Science		Х		Х	Х	Х				Х		Х	Х			Х	Х	Х		Х	
	Environmental and Societal Challenges	Х	Х	Х			Х	Х	Х			Х				Х		Х	Х			
Į́щ	Societies of Prehistoric Europe	Х					Х		Х			Х				Х		Х	Х			
_	Growing up and growing old	Х		Х					Х			Х				Х		Х	Х			
	Rome and Barbarian Europe	Х					Х		Х			Х				Х		Х	Х			
	Understanding Globalisation	Х	Х	Х	Х	Х	Х	Х						Х	Х	Х		Х	Х			
	AAFS Study Skills									Х				Х	Х	Х	Х	Х			Х	Х
4	Ancient Peoples and Places			Х		Х			Х			Х				Х		Х	Х			
	Introduction to Social Theory					Х			Х			Х				Х		Х	Х			
	Human Anatomy and Physiology	Х							Х			Х	Х	Х		Х	Х	Х	Х	Х		
"	Introduction to Social Anthropology	Х	Х	Х	Х		Х	Х	Х			Х				Х		Х	Х			
	Studying Ancient Materials	Х							Х			Х	Х			Х		Х	Х	Х		

A:Sul	pject knowledge and understanding - students will be expected to:	C: Subject-specific skills - students will be expected to:	
A1. A2. A3. A4. A5.	Comprehend the historical development and multidisciplinary nature of social and biological anthropology and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms.  Contextualise their subject-specific knowledge and understanding within the legal frameworks and professional and ethical guidelines which apply to social and biological anthropological practice.  Have a sound knowledge of the ecological, social and historical principles explaining the geographic and temporal patterning of biological and cultural diversity in the contemporary world.  Demonstrate understanding of and ability to apply the major sources of evidence, theories, concepts and principles relevant to the practice of both social and biological anthropology.  Have a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme.	<ul> <li>C1. Identify, select and synthesise a range of lines of evidence relevant to social and/or biological anthropological question.</li> <li>C2. Undertake field, laboratory and desk-based work, selecting and applying safely and ethically appropriate equipment methods for social and biological anthropological research.</li> <li>C3. Plan and carry out investigations into social and biological anthropological questions using an appropriate raqualitative and/or quantitative data collection and analytical methodologies in a reflective and critical manner.</li> <li>C4. Prepare reports and presentations on social/biological anthropological research to professional standard in a raeffective and appropriate formats and for a range of audiences.</li> <li>C5. Critically evaluate and develop theories and hypotheses relating to social and/or biological anthropological quedrawing from appropriate theories and approaches from a range of disciplines.</li> </ul>	ent and inge of
B: Int B1. B2. B3. B4. B5.	ellectual Skills - students will be expected to:  Critically analyse published work in social and biological anthropology and be able to evaluate the merits and limitations of competing explanations of human social, cultural and biological diversity.  Gather, analyse and synthesise information relevant to social and biological anthropological issues.  Engage in reasoned, critical and articulate discussions of anthropological concepts and theories drawing from a range of appropriate scholarly sources to support hypotheses and interpretations.  Identify and critically evaluate routine and unfamiliar problems in social and biological anthropological contexts, apply a range of knowledge and skills to develop and implement practical research and solutions, and evaluate their outcomes.  Plan, execute and report on a piece of original research that demonstrates an understanding of anthropological aims, methods and theoretical considerations.	<ul> <li>D: Transferable skills - students will be expected to:</li> <li>D1. Engage in constructive discussion and work in collaboration with others, including staff and students, demonstrating sensitivity to diversity of identity, language, normative and moral positions and professional and organisational differences.</li> <li>D2. Communicate their own and others' ideas effectively by oral, written and visual means to a range of different audience</li> <li>D3. Be familiar with and able to apply a range of problem-solving techniques including the use of qualitative and quantitat data and appropriate IT such as the Web, spread sheets, databases and word processing.</li> <li>D4. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of t information gathered.</li> <li>D5. Understand their own strengths and weaknesses in learning and study skills and identify and work towards targets fo personal, career, and academic development.</li> <li>D6. Be independent, reflective and critical learners and thinkers.</li> </ul>	ive he

#### PROGRAMME DIAGRAM **BSc (Hons) Archaeology** Exit qualification: BSc (Hons) Year 4/Level 6 Archaeology<sup>3</sup> Choose 1 of the following: Sandwich UG programme: Core units (Compulsory) Emergence and Extinction: Requires 120 Level 6 credits. Archaeological Management (20) Reconstructing Pliocene and Pleistocene Environments (20), Later 120 Level 5 credits and 120 Independent Research Project Prehistoric Britain (20), The Science of Level 4 credits and successful Human Remains (20) completion of a placement year Choose 2 of the following: Animals & Society (20) Sarup to Stonehenge: Neolithic and Chalcolithic Northwest Standard UG programme: Europe (20), Roman Britain (20) Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits \* Year 3/Level P Progression Optional placement year in industry/business requirements Satisfactory completion of a minimum of 30 weeks of work in industry/business Year 2/Level 5 Core units (Compulsory) **Progression requirements Option units** Archaeological Science (20) Choose 2 of the following: Requires 120 credits at Level Field and Research Skills Geographic information Systems (20) (20)Becoming Human (20 Post Excavation Skills (20) Exit qualification: Dip HE **Environmental Archaeology** Rome and Barbarian Europe Archaeology Requires 120 Level 5 credits (20)(20)Societies of Prehistoric and 120 Level 4 credits Europe (20) Maritime Archaeology (20) Year 1/Level 4 Core units (Compulsory) **Progression requirements Ancient Peoples and Places** Requires 120 credits at Level (20)Approaches to Archaeology Exit qualification: Cert HE (20)Archaeology AAFS Study Skills (20) Requires 120 Level 4 credits Archaeological Practice (20) Gathering Time (20) Studying Ancient Materials

<sup>\*</sup>One short placement as an alternative to the optional minimum 30 week placement – Pass/Fail. Failure of a placement which is specified as a programme exit requirement will require a repeat placement/alternative placement.

#### **BSc (Hons) Archaeology**

The BSc (Hons) Archaeology programme provides a broad approach to archaeology with, in roughly equal measure, a three-fold emphasis on archaeological science (including the analysis of materials, deposits, human and animal remains, and environmental indicators); archaeological theory and cultural history (focusing on the prehistoric and Roman periods of Europe); and archaeological practice (including field investigation of sites, structures and deposits, project management, and archaeological resource management). It thus reflects the complementary archaeologies of the humanities, sciences, and professional practice identified in the Subject Benchmark.

#### AIMS OF THE PROGRAMME

This undergraduate programme aims to develop in its students the abilities to work in the archaeological profession and other organisations concerned with archaeology, the historic environment and the heritage sector.

The primary aim of this programme is the development of undergraduates who:

- Have a theoretical and practical knowledge of the scientific, technical and interpretative basis of archaeological practice
- Can apply the acquired range of skills and knowledge to specific archaeological problems, and also communicate effectively with those working in the archaeological profession and with the wider public
- Have the necessary professional knowledge and management skills to develop successful careers in specialist fields of archaeological practice
- Have the ability to carry out independent investigations in the area of archaeological practice
- Have the skills and knowledge necessary for postgraduate study
- Have qualifications to enter The Chartered Institute for Archaeologists (CIfA) at levels appropriate to their experience.

The degree will provide students with a substantial range of transferable skills in communication, working with people, field and laboratory practice, computing, data analysis, problem analysis, research design and project management. These provide a basis for professional activity and development which may be applicable in other career areas.

# **OVERALL PROGRAMME OUTCOMES**

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

Subject knowledge and understanding - students will be expected to:

- A1. Understand evidence, theories, concepts and principles relevant to general archaeological practice
- A2. Have a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme
- A3. Understand the multidisciplinary nature of archaeology and the need to integrate knowledge from a range of subject areas in approaching archaeological issues

- A4. Have knowledge and understanding of management techniques relevant to archaeological practice
- A5. Contextualise this knowledge and understanding within legal frameworks and professional and ethical guidelines which condition archaeological practice

# Intellectual Skills - students will be expected to:

- B1.Critically evaluate issues in an archaeological context;
- B2. Analyse and synthesise information relevant to an archaeological issue
- B3. Apply appropriate knowledge and skills in the development and implementation of approaches to solving archaeological problems, and evaluate their outcomes
- B4. Plan, execute and report on a piece of original research
- B5. Integrate evidence from a range of sources to support findings and hypotheses
- B6. Critically analyse published work in archaeology

# Subject-specific skills - students will be expected to:

- C1. Select and apply appropriate methods of:
- archaeological site investigation
- archaeological site evaluation
- aspects of artefact or ecofact analysis
- C2. Undertake field, laboratory and desk-based work
- C3 Analyse results appropriately
- C4 Prepare reports and presentations of professional format and standard
- C5 Make effective use of the subject literature and other sources of information
- C6 Make effective use of IT and software packages relevant to archaeology

# Transferable skills - students will be expected to:

- D1. Work in collaboration with others, including staff and students
- D2. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D3. Communicate effectively by oral, written and visual means
- D4. Use IT including the Web, spread sheets, databases and word processing
- D5. Apply a range of basic statistical tests on experimental and fieldwork data
- D6. Identify and work towards targets for personal, career, and academic development
- D7. Be independent and reflective learners

# LEVEL 4 OUTCOMES - CERT HE ARCHAEOLOGY

# A. Subject knowledge and understanding - students will be expected to have:

A1. An introductory awareness of the nature of archaeology and the historic environment

- A2. An appreciation of the role of science in archaeological analysis
- A3. An introductory understanding of fieldwork in archaeological practice
- A4. An awareness of some fundamental themes in contemporary archaeological thought
- A5. A knowledge and understanding of the origins and development of archaeology as a discipline
- A6. An awareness of the social, cultural, and political context of archaeological interpretation
- A7. An awareness of the relationship between the practice of archaeology and the institutional context of that practice

# **Learning and Teaching Methods and Strategies**

- lectures that inform by capturing interest and exciting curiosity;
- directed to reading within the specialist literature (including books and periodicals);
- field-visits to appropriate monuments, structures, and collections for direct experience of material covered by the programme;
- practical exercises and demonstrations (in-door and out) and science-based experiments;
- a range of self-guided student-centred learning resources, from paper-based materials to IT-based tutorial modules, chat-rooms, message boards, web-sites and so on.

#### **Assessment**

- written and other types of assignments prepared to a defined timetable;
- examinations requiring written essays and/or multiple choice questions;
- fieldwork and/or laboratory notebooks and reports. (A1-A7)

# Intellectual Skills - students will be expected to:

- B1. Read literature and other sources with understanding
- B2. Recognise situations in which science may be usefully applied in archaeological investigation
- B3. Recognise appropriate techniques in the practice of field archaeology
- B4. Reconstruct arguments drawn from contemporary archaeological themes
- B5. Define appropriate strategies in learning and communication

# **Learning and Teaching Methods and Strategies**

- practical exercises (in-door and out) and science-based experiments;
- field-visits to appropriate monuments, structures, and collections for direct experience of material covered by the programme;
- seminars that provide the context for group work and small-group discussions;
- tutorials and supervisions for structured regular contact with tutors and supervisors.

#### **Assessment**

The assessment of intellectual skills is implicit in elements of the assessment profile listed above (B1 – B5).

Subject specific skills - students will be expected to:

- C1. Observe and describe different classes of primary archaeological data, and objectively record their characteristics
- C2. Use designated laboratory and fieldwork equipment to generate data
- C3. Effectively use sources of archaeological information
- C4. Select and apply appropriate statistical techniques to process archaeological data, recognising the potential and limitations of such techniques
- C5. Discover and recognise the archaeological significance of material remains and landscapes
- C6. Interpret spatial data, integrating theoretical models, traces surviving in present-day landscapes, and excavation data

# **Learning and Teaching Methods and Strategies**

- written and other types of assignment prepared to a defined timetable
- field-visits to appropriate monuments, structures, and collections for direct experience of material covered by the programme;
- practical exercises and demonstrations (in-door and out) and science-based experiments.
   (C1 C6)

#### Assessment

- tests through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions;
- fieldwork and/or laboratory notebooks and reports.

#### Transferable skills - students will be expected to:

- D1. Present effective oral presentations for different kinds of audiences;
- D2. Make effective and appropriate use of C&IT (for example, word processing packages; databases; and spread sheets)
- D3. Prepare effective written communications for different readerships
- D4. Make effective and appropriate forms of visual presentation (graphics, photographs, spread sheets)
- D5. Use information retrieval skills using paper-based and electronic (including www) resources
- D6. Apply a range of basic statistical tests to numerical data
- D7. Collaborate effectively in a team via experience of working in a group, for example through fieldwork, laboratory and/or project work
- D8. Appreciate the importance of safety procedures and responsibilities (both personal and with regard to others) in the field and the laboratory
- D9. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D10. Be independent and reflective learners

# **Learning and Teaching Methods and Strategies**

- lectures that inform by capturing interest and exciting curiosity;
- directed reading within the specialist literature (including books and periodicals;
- practical exercises and demonstrations (in-door and out) and science-based experiments.

#### **Assessment**

Transferable skills are assessed as elements within the assessment profile for this level noted above, additional assessments are in:

- oral presentations;
- annotated bibliographies

#### **LEVEL 5 OUTCOMES - DIPHE ARCHAEOLOGY**

#### Subject knowledge and understanding - students will be expected to have:

- A1. An understanding of the intellectual vitality of archaeology, its theoretical basis, current debates over approaches to interpretation, and archaeology's relationship to other disciplines
- A2. An understanding of scientific study of archaeological objects and materials
- A3. An understanding of principles of environmental investigation in archaeology
- A4. A basic knowledge of archaeological project management
- A5. A knowledge of research methods applicable to archaeological contexts
- A6. An understanding of the concepts and application of scientific methods used in collecting, analysing, and interpreting archaeological data
- A7. From specialised investigation, deep understanding of one or more distinct classes of archaeological material
- A8. An appreciation of the social, cultural, and political context of archaeological interpretation familiarity with the basic concepts which underpin the subject (such as: archaeological uses of assemblage, culture, and style; approaches to typology, taxonomy, and ancient technology; stratigraphic context; temporality; and landscape)
- A9. An understanding of the causes of variation in the reliability of different classes of evidence from archaeological contexts (such as: taphonomy; cultural and non-cultural transformations; depositional processes; and recovery procedures)
- A10. An appreciation of the importance of the recovery of primary data through practical experience
- A11. A critical awareness of methodologies for quantifying, analysing, and interpreting primary data
- A12. An understanding of the use of analogy and experiment in archaeological analysis

# **Learning and Teaching Methods and Strategies:**

- · lectures that inform by capturing interest and exciting curiosity;
- directed reading within the specialist literature (including books and periodicals);
- field-visits to appropriate monuments, structures, and collections for direct experience of material covered by the programme;
- field investigation projects including excavations and surveys of various sorts;

- 'hands-on' practical exercises and science-based experiments, laboratory-based demonstrations, artefact handling and identification work;
- practical exercises and demonstrations (in-door and out) in excavation and survey methodologies;
- a range of self-guided student-centred learning resources, from paper-based materials to IT-based tutorial modules, chat-rooms, message boards, web-sites and so on;
- team-based exercises:
- work place experience with an archaeological organisation or museum.

#### Assessment:

- essays and assignments prepared to a defined timetable;
- examination through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions;
- fieldwork and/or laboratory notebooks and reports;
- unseen tests.

(A1 - A12)

#### Intellectual Skills - students will be expected to:

- B1. Marshal and critically appraise other people's arguments
- B2. Generate hypotheses based on data derived from excavation and fieldwork
- B3. Produce logical and structured arguments supported by relevant evidence
- B4. Assemble coherent research/project designs
- B5. Exercise informed judgment in using appropriate methods of data gathering and analysis
- B6. Draw down and apply appropriate scholarly, theoretical, and scientific principles and concepts to archaeological problems

### Learning and Teaching Methods and Strategies:

Intellectual skills are acquired through the methodologies listed in 2.2.1 and in addition through:

- seminars that provide the context for group work and small-group discussions;
- tutorials and supervisions for structured regular contact with tutors and supervisors.

#### Assessment:

• The assessment of intellectual skills is implicit in elements of the assessment profile listed above (B1-B6).

# Subject specific skills - students will be expected to:

- C1. Practice core fieldwork techniques of identification, surveying, recording, excavation, and sampling
- C2. Practice core laboratory techniques of recording, measurement, analysis, and interpretation of archaeological material
- C3. Observe and describe different classes of primary archaeological data, and objectively record their characteristics
- C4. Select and apply appropriate statistical techniques to process archaeological data, recognising the potential and limitations of such techniques
- C5. Discover and recognise the archaeological significance of material remains and landscapes

- C6. Interpret spatial data, integrating theoretical models, traces surviving in present-day landscapes, and excavation data
- C7. Prepare reports and presentations to professional standards

# **Learning and Teaching Methods and Strategies:**

- field investigation projects including excavations and surveys of various sorts;
- 'hands-on' practical exercises and science-based experiments, laboratory-based demonstrations, artefact handling and identification work;
- practical exercises and demonstrations (in-door and out) in excavation and survey methodologies;
- a range of self-guided student-centred learning resources, from paper-based; materials to IT-based tutorial modules, chat-rooms, message boards, web-sites and so on;
- team-based exercises.

#### Assessment:

- fieldwork and/or laboratory notebooks and reports;
- observed participation of practical team-based exercises in the field, laboratory and/or classroom:
- portfolios of work relating to practical exercises; (C1-C7)

# Transferable skills - students will be expected to:

- D1. Be reflective learners and analyse their strengths and weaknesses
- D2. Prepare effective written communications for different readerships
- D3. Make effective and appropriate use of C&IT (for example: word processing packages; databases; and spread sheets)
- D4. Make critical and effective use of information retrieval skills using paper-based and electronic (including www) resources
- D5. Make effective and appropriate forms of visual presentation (graphics, photographs, spread sheets)
- D6. Plan, design, and execute a programme of primary research, working independently
- D7. Collaborate effectively in a team via experience of working in a group, for example through fieldwork, laboratory and/or project work
- D8. Demonstrate problem-solving skills
- D9. Conduct analyses of qualitative and quantitative data
- D10. Appreciate the importance of safety procedures and responsibilities (both personal and with regard to others) in the field and the laboratory
- D11. (As fieldwork often involves working in new environments with minimal support) appreciate and be sensitive to different cultures, and deal with unfamiliar situations

#### **Learning and Teaching Methods and Strategies:**

Transferable skills continue to be developed through the range of learning and teaching strategies outlined above, particularly in:

• field investigation projects including excavations and surveys of various sorts;

- 'hands-on' practical exercises and science-based experiments, laboratory-based demonstrations, artefact handling and identification work;
- practical exercises and demonstrations (in-door and out) in excavation and survey methodologies;
- a range of self-guided student-centred learning resources, from paper-based; materials to IT-based tutorial modules, chat-rooms, message boards, web-sites and so on;
- team-based exercises:
- work place experience with an archaeological organisation or museum.

#### Assessment:

- fieldwork and/or laboratory notebooks and reports;
- observed participation of practical team-based exercises in the field, laboratory and/or classroom:
- portfolios of work relating to practical exercises;
   (D1 D11)

# Level 6 outcomes - BSc (Hons) Archaeology

# Subject knowledge and understanding - students will be expected to have:

- A1. An understanding of the relationship between the practice of archaeology and the institutional context of that practice
- A2. A broad and comparative knowledge of the archaeology of selected geographical regions
- A3. A broad and comparative knowledge of the archaeology of selected chronological periods
- A4. From specialised investigation, deep understanding of one or more distinct classes of archaeological material
- A5. An appreciation of the social, cultural, and political context of archaeological interpretation

# Learning and Teaching Methods and Strategies:

Many of the methodologies previously listed will continue to be employed, but there will be an increased emphasis on independent and group-based learning. The student's experience will depend on the options selected. Of particular note is independent learning associated with the directed or independent research project.

# **Assessment:**

In the core units:

- essays and assignments prepared to a defined timetable;
- examination through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions;
- production of a directed or independent research project

# Intellectual Skills - students will be expected to:

- B1. Marshal and critically appraise other people's arguments. Critically evaluate and review information from a range of sources
- B2. Define problems, devise and evaluate possible solutions
- B3. Assemble coherent research/project designs

- B4. Draw down and apply appropriate scholarly, theoretical, and scientific principles and concepts to archaeological problems
- B5. Critically apply knowledge and understanding to specific situations

# **Learning and Teaching Methods and Strategies:**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. The student's experience will depend on the options selected. Of particular note is the independent learning associated with the research project.

#### Assessment:

In the core units:

- essays and assignments prepared to a defined timetable;
- examination through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions;
- production of a research project.

#### Subject specific skills - students will be expected to:

- C1. Observe and describe different classes of primary archaeological data, and objectively record their characteristics
- C2. Conduct and present a research project
- C3. Relate original research findings to existing literature and archaeological context

# Learning and Teaching Methods and Strategies:

Subject specific skills are acquired through the learning and teaching methods and strategies outlined above. The student's experience will depend on the options selected. Of particular note is the learning associated with the research project.

# Assessment:

In the core units:

- essays and assignments prepared to a defined timetable;
- examination through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions;
- production of a research project

# Transferable skills - students will be expected to:

- D1. Undertake self-management and personal organisation (e.g. time management)
- D2. Work under pressure to meet deadlines
- D3. Communicate effectively
- D4. Plan, design, and execute a programme of primary research, working independently
- D5. (As fieldwork often involves working in new environments with minimal support) appreciate and be sensitive to different cultures, and deal with unfamiliar situations
- D6. Be able critically to evaluate one's own and others' opinions, from an appreciation of the practice of archaeology in its changing theoretical, methodological, professional, ethical, and social contexts

# **Learning and Teaching Methods and Strategies:**

Transferable skills are acquired through the learning and teaching methods and strategies outlined above. The student's experience will depend on the options selected

# Assessment:

In the core units:

- essays and assignments prepared to a defined timetable;
  examination through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions;
  production of a research project

# BSc Archaeology Programme Skills Matrix Template Matrix table showing the relationship between ILOs for a programme and its constituent units

	Matrix table showing the relationship between icos for a programme and its constituent units																								
										Prog	ramm	ne Inte	endec	<u>Lear</u>	ning	Outco	omes								
	Units	Α	Α	Α	Α	Α	В	В	В	В	В	В	С	С	С	С	С	С	D	D	D	D	D	D	D
		1	2	3	4	5	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	7
	The Science of Human Remains	Χ		Χ				Χ	Χ		Χ	Χ	Χ	Χ	Χ		Χ		Χ		Χ	Χ	Χ		Х
	Archaeological Management	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ				Χ	Χ		Χ	Х
9	Emergence and Extinction: Reconstructing Pliocene and Pleistocene Environments			Х							Χ	Χ					Χ				Χ	Χ			Х
ш	Independent Research Project	Χ	Χ	Χ			Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	?	Χ	Χ	Χ	Χ	?		X
	Later Prehistoric Britain		Χ				Χ	Χ			Χ	Χ					Χ				Χ	Χ			X
	Animals and Society		Χ				Χ	Χ			Χ	Χ					Χ				Χ	Χ			X
	Sarup to Stonehenge: Neolithic and Chalcolithic Northwest Europe		Χ				Χ	Χ			Χ	Χ					Χ				Χ	Χ			Х
	Roman Britain		Χ				Χ	Χ			Χ	Χ					Χ				Χ	Χ		l	X
	Archaeological Science		Χ		Χ	Χ	Χ	Χ	Χ		Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
	Field and Research Skills *	Χ		Χ			Χ	Χ	Χ		Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
١.,	Post Excavation Skills	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
4.	Geographic Information Systems										Χ				Χ		Χ	Χ		Χ	Χ	Χ			
	Environmental Archaeology and Paleoecology	Χ		Χ			Χ	Χ			Χ		Χ				Χ				Χ	Χ			
ÍЩ	Becoming Human			Χ			Χ	Χ			Χ						Χ				Χ	Χ			
	Maritime Archaeology		Χ				Χ	Χ			Χ						Χ				Χ	Χ			
	Rome and Barbarian Europe		Χ				Χ	Χ			Χ						Χ				Χ	Χ			
	Societies of Prehistoric Europe		Χ				Χ	Χ			Χ						Χ				Χ	Χ			
	Ancient Peoples and Places	Χ	Χ				Χ	Χ									Χ				Χ	Χ			
4	Approaches to Archaeology	Χ	Χ	Χ			Χ										Χ				Χ	Χ			
ш	AAFS Study Skills	Χ		Χ			Χ	Χ	Χ		Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
	Archaeological Practice	Χ			Χ	Χ	Χ	Χ	Χ				Χ	Χ	Χ		Χ				Χ	Χ			
=	Gathering Time	Χ		Χ													Χ				Χ	Χ			
	Studying Ancient Materials	Χ											Χ		Χ		Χ				Χ	Χ			

A - Subject Knowledge and Understanding	C – Subject-specific/Practical Skills							
1 understand evidence, theories, concepts and principles relevant to general archaeological practice	1 select and apply appropriate methods of: archaeological site investigation; archaeological site evaluation; aspects of artefact or ecofact analysis							
2 have a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme	2 undertake field, laboratory and desk-based work							
3 understand the multidisciplinary nature of archaeology and the need to integrate knowledge from a range of subject areas in approaching archaeological issues	s analyse results appropriately							
4 have know ledge and understanding of management techniques relevant to archaeological practice	4 prepare reports and presentations of professional format and standard							
5 contextualise this know ledge and understanding within legal frameworks and professional and ethical guidelines which condition archaeological practice	5 make effective use of the subject literature and other sources of information							
6	make effective use of IT and software packages relevant to archaeology (specialist)							
B - Intellectual Skills	D- Transferable Skills							
1 critically evaluate issues in an archaeological context	1 w ork in collaboration with others, including staff and students							
2 analyse and synthesise information relevant to an archaeological issue	2 demonstrate problem solving skills and the application of know ledge across discipline areas							
3 apply appropriate knowledge and skills in the development and implementation of approaches to solving archaeological problems, and evaluate their outcomes	3 communicate effectively by oral, written and visual means							
4 plan, execute and report on a piece of original research	4 use IT including the Web, spread sheets, databases and word processing (general)							
5 integrate evidence from a range of sources to support findings and hypotheses	5 apply a range of basic statistical tests on experimental and fieldwork data							
6 critically analyse published w ork in archaeology	6 identify and w ork tow ards targets for personal, career, and academic development							
	7 be independent and reflective learners							

# **BA (Hons) Archaeology and Anthropology**

#### PROGRAMME DIAGRAM **BA (Hons) Archaeology and Anthropology** Year 4/Level 6 Exit qualification: BA (Hons) Choose 1 of the following: Later Archaeology and Prehistoric Britain (20), Archaeological **Anthropology** Core units (Compulsory) Management (20), Anthropology of International Intervention (20), Sandwich UG programme: Independent Research Seekers, Believers and Iconoclasts: Requires 120 Level 6 credits, Project (40) Sociology of thought (20) 120 Level 5 credits and 120 Cultural Ecology (20) Choose 2 of the following: Animals Level 4 credits and successful & Society (20), Primate Behavioural Ecology (20), Sarup to Stonehenge: completion of a placement year Neolithic and Chalcolithic Northwest Europe (20), Roman Britain (20) Standard UG programme: Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits Year 3/Level P Optional placement year in industry/business **Progression** requirements Satisfactory completion of a minimum of 30 weeks of work in industry/business Year 2/Level 5 Core units (Compulsory) Option units **Progression requirements** Choose 1 of the following: Requires 120 credits at Level Post Excavation skills (20) Field and Research Skills Archaeological Science (20) (20)Understanding Cultures (20) Exit qualification: Dip HE Themes in Archaeology and Choose 2 of the following: Anthropology (20) Archaeology and Growing up and Growing Old (20) Becoming Human (20) **Anthropology** Rome & Barbarian Europe (20) Societies of Prehistoric Europe (20) Requires 120 Level 5 credits Maritime Archaeology (20) and 120 Level 4 credits Year 1/Level 4 **Progression requirements** Core units (Compulsory) Requires 120 credits at Level Ancient Peoples and Places (20) Approaches to Archaeology (20) AAFS Study Skills (20 Exit qualification: Cert HE Archaeological Practice (20) Archaeology and Gathering Time (20) Anthropology Introduction to Social Anthropology Requires 120 Level 4 credits (20)

# **BA (Hons) Archaeology and Anthropology**

The programme offers a comprehensive range of topics, including archaeological and anthropological theory, prehistory, cultural ecology, environmental archaeology, field archaeology, social anthropology and sociology, biological anthropology, primate behavioural ecology, and human evolution. The collaboration between schools means that, unusually for Archaeology and Anthropology programmes, there is equal strength of expertise across all three fields (natural sciences, social sciences, humanities), and as a result, after the thorough grounding students receive in the fundamentals of archaeology, as well as social and biological anthropology at Level C, they are able to select optional units at Level I and H from Applied Sciences and/or Health and Social Care that allow them either to specialise in one of the three fields or to pursue a programme of study which maintains a balance between two or all three fields throughout the programme. The design of the programme facilitates this through the range of available optionality, ensuring that core elements of the curriculum can be combined with bespoke optional units in a way that interrelate the three fields or to create different pathways within the programme.

# AIMS OF THE PROGRAMME

This undergraduate programme aims to develop in its students the knowledge, understanding, skills and abilities that will allow them to progress to further study or to employment in areas related to the investigation and preservation of the prehistoric and historic environment and/or in human biological and social diversity and development.

The primary aim of this programme is the development of undergraduates who:

- Have a firm understanding of the practical, technical and theoretical bases of archaeological and anthropological practice and interpretation
- Appreciate the range of human social, biological and cultural diversity in contemporary, historic and prehistoric contexts
- Understand the ways in which humans interact with one another as individuals, groups and social institutions, and with their cultural and physical environments
- Understand and are able to apply the key theories and lines of evidence relating to the investigation of human social, biological and cultural variation and its evolution and change over time
- Appreciate the distinctive features of, and relationships between, biological and social anthropology and archaeology and their strengths and limitations in relation to other related disciplines
- Can apply the acquired range of skills and knowledge to specific archaeological and anthropological problems, and also communicate effectively with those working in these professions and with the wider public
- Recognise the global social contexts and politics which impact on work in archaeology and social and biological anthropology and engage with other cultures, individuals and groups with sensitivity and judgment
- Have the necessary professional knowledge and management skills to develop successful careers in specialist fields of archaeological and biological and social anthropological practice
- Have the ability to carry out independent investigations in the area of archaeological, biological and/or social anthropological practice
- Have the skills and knowledge necessary for postgraduate study
- Have the qualifications to enter professional bodies/practitioner organisations at levels appropriate to their experience.

The degree also aims to provide students with a substantial range of transferable skills in communication, working with people, field and laboratory practice, computing, data analysis, problem-solving, report-writing, critical analysis of information sources, research design and project management. These provide a basis for professional activity and development which may be applicable in other career areas.

#### INTENDED LEARNING OUTCOMES

The programme outcomes cover the relevant academic subjects at honours level and set out he expectations including, subject knowledge, understanding and skills of an honours graduate in sociology and social policy the teaching, learning and assessment methods employed in their education the standards expected of them at the point of graduation.

\*All programme learning outcomes have been written to reflect the QAA benchmark outcome statements (2007) and the Framework for Higher Education Qualifications (FHEQ).

# **OVERALL PROGRAMME OUTCOMES**

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

# A. Subject knowledge and understanding - students will be expected to:

- A1. Demonstrate knowledge and understanding of evidence, theories, concepts and principles relevant to the practice of archaeology and social and biological anthropology
- A2. Have a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme
- A3. Have a sound knowledge of the range of cultural diversity in the past and contemporary world and its temporal and geographical patterning
- A4. Understand the historical development and multidisciplinary nature of archaeology and social and biological anthropology and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms
- A5. Contextualise their subject-specific knowledge and understanding within the legal frameworks and professional and ethical guidelines conditioning archaeological and social and biological anthropological practice

# B. Intellectual Skills - students will be expected to:

- B1. Identify and critically evaluate routine and unfamiliar problems in archaeological and social and biological anthropological contexts and apply a range of knowledge and skills to develop and implement practical research and solutions and evaluate their outcomes
- B2. Analyse and synthesise information relevant to archaeological and social and biological anthropological issues
- B3. Plan, execute and report on a piece of original research
- B4. Integrate evidence from a range of sources to support findings and hypotheses
- B5. Critically analyse published work in archaeology and social and biological anthropology and be able to critically assess the merits and limitations of competing explanations of human diversity and behaviour
- B6. Engage in reasoned, critical and articulate discussions based on a range of

#### C. Subject-specific skills - students will be expected to:

- C1. Identify appropriate archaeological and social and biological anthropological questions and problems for investigation
- C2. Undertake field, laboratory and desk-based work, selecting and applying safely appropriate field, laboratory and analytical equipment and methods for archaeological and social and biological anthropological investigation and observing and recording results accurately
- C3. Consider the ethical implications of archaeological and social and biological anthropological research in a variety of applied research settings
- C4. Integrate archaeological and social/biological anthropological information and analyse and interpret results objectively using an appropriate range of qualitative and/or quantitative methodologies in a reflective and critical manner
- C5. Prepare reports and presentations on archaeological and social/biological anthropological research to professional standard in a range of effective and appropriate formats
- C6. Make effective use of the archaeological and social/biological anthropological literature and other sources of information
- C7. Make effective use of IT and software packages relevant to archaeology and social and biological anthropology

#### D. Transferable skills - students will be expected to:

- D1. Work in collaboration with others, including staff and students, and negotiate across differences such as organisational and professional boundaries and differences of identity or language
- D2. Demonstrate sensitivity to the values and interest of others, taking into account different normative and moral positions
- D3. Communicate effectively by oral, written and visual means
- D4. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D5. Use IT including the Web, spread sheets, databases and word processing
- D6. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered.
- D7. Identify and work towards targets for personal, career, and academic development
- D8. Be independent and reflective learners

# Level 4 Outcomes - CertHE Archaeology and Anthropology

#### A. Subject knowledge and understanding - students will be expected to:

A1. Be aware of the nature of archaeology and social and biological anthropology and be familiar with some fundamental themes in contemporary archaeological and social and biological anthropological thought

- A2. Demonstrate an understanding of the complementary roles of fieldwork and analysis in archaeological and social and biological anthropological practice, and appreciate the role of scientific practice more broadly
- A3. Have obtained a range of basic practical laboratory and fieldwork experience and skills
- A4. Have obtained a range of academic skills, including academic writing, referencing and qualitative and quantitative analysis
- A5. Demonstrate a knowledge and understanding of the origins and development of the disciplines of archaeology and social and biological anthropology
- A6. Demonstrate awareness of the social, cultural and political context of archaeological and social and biological anthropological interpretation

## B. Intellectual Skills - students will be expected to:

- B1. Identify and utilise appropriate information sources.
- B2. Recognise and apply appropriate learning and communication methods
- B3. Read literature and other sources with understanding
- B4. Recognise and demonstrate an understanding of the fundamentals of a range of techniques, including scientific methods, in the practice of archaeology and social and biological anthropology and when they may be applied
- B5. Identify key differences between the interpretation and significance of qualitative and quantitative data
- B6. Construct coherent arguments relating to major contemporary archaeological and social and biological anthropological themes

## C. Subject specific skills - students will be expected to:

- C1. Recognise, observe and describe different classes of primary archaeological and social and biological anthropological data, record accurately and objectively and report the data appropriately
- C2. Use laboratory and fieldwork equipment to generate data
- C3. Identify and use effectively a variety of differing types of archaeological and social and biological anthropological information and evidence
- C5. Select and apply appropriate qualitative and quantitative techniques to process archaeological and social and anthropological data and recognise the potential and limitations of such techniques
- C4. Write appropriately structured reports and make effective oral presentations on archaeological and social/biological anthropological research for a range of different audiences.
- C6. Integrate a range of different kinds of information from across archaeology, social and biological anthropology and related disciplines to develop plausible interpretations of evidence

## D. Transferable skills - students will be expected to:

D1. Collaborate effectively in a team with others, including staff and students, and negotiate across differences such as organisational and professional boundaries and differences of identity or language

- D2. Appreciate the importance of safety procedures and responsibilities (both personal and with regard to others) in the field and the laboratory
- D3. Demonstrate sensitivity to the values and interest of others, taking into account different normative and moral positions
- D4. Communicate effectively by oral, written and visual means with different audiences
- D5. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D6. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered
- D7. Use IT including the Web, spread sheets, databases and word processing
- D8. Be independent and reflective learners

## <u>Level 5 Outcomes – DipHE Archaeology and Anthropology</u>

## A. Subject knowledge and understanding - students will be expected to have:

- A1. An understanding of the intellectual vitality of archaeology and social/biological anthropology, the theoretical bases of the disciplines, current debates over approaches to interpretation, and the relationships among the disciplines and with other related subjects
- A2. An understanding of the basic concepts and application of practical methods used in collecting, analysing using qualitative and quantitative techniques and interpreting archaeological and/or biological/social anthropological data
- A3. A basic knowledge of archaeological project management
- A4. Knowledge of research methods applicable to archaeological and social and biological anthropological contexts
- A5. Demonstrated a detailed knowledge and understanding of a chosen specialised area (e.g. class of data, period or region) of archaeology and/or social/biological anthropology
- A6. An appreciation of the social, cultural, and political context of archaeological and social and biological anthropological interpretation and its wider relevance in the contemporary world
- A7. An appreciation of the causes of variation in the reliability of different classes of evidence from archaeological and social/biological anthropological contexts (such as: taphonomy; cultural and non-cultural transformations; depositional processes; recovery procedures; cultural bias)
- A8. An appreciation of the importance of the recovery of primary data through practical experience

## B. Intellectual Skills - students will be expected to:

- B1. Marshal and critically appraise other people's arguments
- B2. Generate hypotheses based on data derived from excavation and fieldwork
- B3. Produce logical and structured arguments supported by relevant evidence

- B4. Assemble coherent research/project designs
- B5. Exercise informed judgment in using appropriate methods of data gathering and qualitative and quantitative analysis
- B6. Draw down and apply appropriate scholarly, theoretical, and scientific principles and concepts to archaeological problems
- B7. Evaluate competing arguments in archaeology and social/ biological anthropology and related disciplines.

## C. Subject-specific skills - students will be expected to

- C1. Recognise the nature and significance of different kinds of data and evidence central to archaeology and social/ biological anthropology
- C2. Practice a variety of core fieldwork techniques including identification, surveying, recording, excavation, sampling and participant observation
- C3. Use field and/or laboratory equipment safely and appropriately
- C4. Practice core post-fieldwork and laboratory techniques of the accurate and objective recording, measurement, analysis and interpretation of archaeological and social/biological anthropological material
- C5. Observe and describe different classes of primary archaeological data, and objectively record their characteristics
- C6. Select and apply appropriate qualitative and quantitative techniques to process archaeological, and social/biological anthropological data, recognising the potential and limitations of such techniques
- C7. Prepare reports and presentations to professional standards

## D. Transferable skills: Students will be expected to

- D1. Be reflective learners and analyse their strengths and weaknesses
- D2. Prepare effective written communications for different readerships
- D3. Make effective and appropriate use of C&IT (for example: word processing packages, databases and spread sheets)
- D4. Make critical and effective use of information retrieval skills using paper-based and electronic (including WWW) resources
- D5. Make effective and appropriate forms of visual presentation (graphics, photographs, spread sheets)
- D6. Collaborate effectively in a team via experience of working in a group, for example through fieldwork, laboratory and/or project work
- D7. Demonstrate problem-solving skills
- D8. Conduct analyses of qualitative and quantitative data
- D9. Appreciate the importance of safety procedures and responsibilities (both personal and with regard to others) in the field and the laboratory
- D10. Appreciate and be sensitive to different cultures and diverse individuals

## Level 6 outcomes - BA (Hons) Archaeology and Anthropology.

## A. Subject knowledge and understanding - students will be expected to:

- A1. Demonstrate knowledge and understanding of evidence, theories, concepts and principles relevant to the practice of archaeology and social and biological anthropology
- A2. Have a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme
- A3. Have a sound knowledge of the range of cultural diversity in the past and contemporary world and its temporal and geographical patterning
- A4. Understand the historical development and multidisciplinary nature of archaeology and social and biological anthropology and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms
- A5. Contextualise their subject-specific knowledge and understanding within the legal frameworks and professional and ethical guidelines conditioning archaeological and social and biological anthropological practice

## B. Intellectual Skills - students will be expected to:

- B1. Identify and critically evaluate routine and unfamiliar problems in archaeological and social and biological anthropological contexts and apply a range of knowledge and skills to develop and implement practical research and solutions and evaluate their outcomes
- B2. Analyse and synthesise information relevant to archaeological and social and biological anthropological issues
- B3. Plan, execute and report on a piece of original research
- B4. Integrate evidence from a range of sources to support findings and hypotheses
- B5. Critically analyse published work in archaeology and social and biological anthropology and be able to critically assess the merits and limitations of competing explanations of human diversity and behaviour
- B6. Engage in reasoned, critical and articulate discussions based on a range of appropriate scholarly sources

## C. Subject-specific skills - students will be expected to:

- C1. Identify appropriate archaeological and social and biological anthropological questions and problems for investigation
- C2. Undertake field, laboratory and desk-based work, selecting and applying safely appropriate field, laboratory and analytical equipment and methods for archaeological and social and biological anthropological investigation and observing and recording results accurately
- C3. Consider the ethical implications of archaeological and social and biological anthropological research in a variety of applied research settings
- C4. Integrate archaeological and social/biological anthropological information and analyse and interpret results objectively using an appropriate range of qualitative and/or quantitative methodologies in a reflective and critical manner
- C5. Prepare reports and presentations on archaeological and social/biological anthropological research to professional standard in a range of effective and

- appropriate formats
- C6. Make effective use of the archaeological and social/biological anthropological literature and other sources of information
- C7. Make effective use of IT and software packages relevant to archaeology and social and biological anthropology

## D. Transferable skills - students will be expected to:

- D1. Work in collaboration with others, including staff and students, and negotiate across differences such as organisational and professional boundaries and differences of identity or language
- D2. Demonstrate sensitivity to the values and interest of others, taking into account different normative and moral positions
- D3. Communicate effectively by oral, written and visual means
- D4. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D5. Use IT including the Web, spread sheets, databases and word processing
- D6. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered
- D7. Identify and work towards targets for personal, career, and academic development
- D8. Be independent and reflective learners

## **LEARNING AND TEACHING STRATEGIES AND METHODS**

## **Level 4 Learning and Teaching Methods and Strategies**

## Subject knowledge and understanding

- Lectures that inform by capturing interest and exciting curiosity.
- Directed reading within the specialist literature (including books and periodicals).
- Practical exercises, experiments and demonstrations (in-door and out).
- A range of self-guided student-centred learning resources, from paper-based materials to IT-based tutorial modules, chat-rooms, message boards, web-sites and so on.

## **Intellectual Skills**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above in addition to the below specified learning contexts students are encouraged by academic staff to undertake independent reading and the University Support Services offer sessions in the use of, for example, library and study skills.

## Subject specific skills

Specific subject outcomes are attained through the learning and teaching methods outlined above, including lectures, practicals, fieldwork and small-group work. Additional support in the area of library skills is provided by the Subject Librarian during the first term.

#### Transferable skills

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level C. Regular feedback on assignments, formative online assignments and in practicals allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level C units and through individual learning that is supported by University-wide workshops offered by Academic Services.

## Subject Knowledge and understanding:

- lectures that inform by capturing interest and exciting curiosity
- directed reading within the specialist literature (including books and periodicals)
- field-visits to appropriate monuments, structures, and collections for direct experience of material covered by the programme
- 'Hands-on' practical exercises and science-based experiments, laboratory-based demonstrations, artefact handling and identification work as individuals or in groups
- practical exercises and demonstrations (in-door and out) in excavation and survey methodologies
- a range of self-guided student-centred learning resources, from paper-based materials to IT-based tutorial modules, chat-rooms, message boards, web-sites and so on
- team- and group-based exercises
- workplace experience with an archaeological organisation or museum
- group activities aimed at application of theory to practice
- observation and exploration of others' lived experience through direct contact and/or media such as autobiography, ethnography or film

Students will be expected to review published sources to investigate a range of key concepts and case study material.

#### Intellectual skills:

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above and in

- Seminars and discussion sessions, including student-led discussions and presentation, aimed at developing students' knowledge and critical focus individually and in group work and small-group discussions.
- Tutorials and supervisions for structured regular contact with tutors and supervisors.

Students are expected by academic staff to undertake independent reading and the University Support Services offer sessions in the use of, for example, library and study skills.

## Subject-specific skills:

Specific subject outcomes are attained through the learning and teaching methods and strategies outlined above and in

Field investigation projects including excavations and surveys of various kinds.

Additional support in the area of library skills is provided by the Subject Librarian during the first term.

## Transferable skills:

Transferable skills are developed through the learning and teaching methods and strategies outlined above and in Workplace experience with an archaeological or social or biological anthropological museum or other organisation.

Students are expected to undertake independent reading and to relate the concepts introduced in Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allow students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 5 units and through individual learning that is supported by University-wide workshops offered by Academic Services.

## **Level 6 Teaching and Learning Strategies**

## Subject knowledge and understanding

Many of the methodologies previously listed will continue to be employed, but there will be an increased emphasis on independent and group-based learning. The student's experience will depend on the options selected, but all students will be expected to review published sources to investigate a range of key concepts and case study material. In some cases, they will be involved in collecting their own data or being given realistic data. Students will be expected

to undertake research and/or interpret data as part of the research project.

## **Intellectual Skills**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. The student's experience will depend on the options selected. Of particular note is independent learning associated with the research project. Students are expected by academic staff to undertake independent reading and the University support services offer sessions in the use of, for example, library and study skills.

## Subject specific skills

Subject specific skills are acquired through the learning and teaching methods and strategies outlined above. The student's experience will depend on the options selected. Of particular note is independent learning associated with the research project. The project supervisor provides specific support for the student and, where appropriate, technical support is also provided.

#### Transferable skills

Transferable skills are acquired through the learning and teaching methods and strategies outlined above. The student's experience will depend on the options selected. Students are expected to undertake independent reading and to relate the concepts introduced in Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. Of particular note is independent learning associated with the research project. Project meetings also provide the forum for debate, development and the exchange of ideas.

## ASSESSMENT STRATEGIES AND METHODS Level 4 Assessment strategies

## Subject knowledge and understanding

Core knowledge is assessed through

- field and laboratory reports (A2, A3)
- unseen examinations (A1, A4, A5, A6)
- written tests and assignments (A1, A4, A5, A6)
- assessed practical work (A2, A3)
- e-portfolios comprised of online exercises (A4).

## **Intellectual Skills**

Intellectual skills are assessed through:

- field and laboratory reports (B2, B4, B5)
- unseen examinations (B2, B3, B6)
- written assignments (B1, B2, B3, B6).

## Subject specific skills

Subject specific skills are assessed through:

- field and laboratory reports (C1, C3, C4)
- unseen examinations (C3, C6)
- fieldwork (C2)
- written assignments (C1, C3, C4, C6).

#### Transferable skills

Transferable skills are important criteria in the assessment of all student work.

- D1, D2 and D3 are assessed through team field and/or post-fieldwork work.
- D4 D8 are assessed through the coursework and examinations elements of a number of Level C units
- D6 and D7 are additional and specifically addressed by the Investigative and Reporting Skills unit

## **Level 5 Assessment Strategies**

## Subject knowledge and understanding

Core knowledge is assessed through:

Core units:

- essays and written assignments and exercises prepared to a defined timetable (A1, A2, A4, A5, A6)
- fieldwork and/or laboratory notebooks, post-excavation archives and reports (A2, A3, A8, A9)
- unseen in-class tests (A2, A5, A7)
- oral group presentation (A1, A2, A4, A5, A6)

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Option unit assessment strategies include the above, and additionally:

 examination through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions (A1, A2, A5)

## Intellectual skills

The assessment of intellectual skills is implicit in elements of the assessment profile listed above.

## Subject-specific skills

Subject specific skills are assessed through:

- Observed participation of practical team-based exercises in the field or classroom (C1, C4, C5, C6).
- Fieldwork and post excavation archives, notebooks and reports (C1, C2, C3, C5).
- In-class spotter tests (C1, C2, C5)
- Written tests and assignments (C1, C4, C6, C7)
- Oral group presentation (C1, C6, C7)

## Transferable skills

Transferable skills are assessed through:

- Fieldwork and/or laboratory notebooks and reports (D1, D2, D3, D5, D9).
- Observed participation of practical team-based exercises in the field, laboratory and/or classroom (D2, D6, D7, D9, D10)
- Written tests and assignments (D2, D3, D4, D5, D8)
- Oral group presentation (D1, D2, D3, D4, D5, D6, D10)

## **Level 6 Assessment Strategies**

## Subject knowledge and understanding:

All areas of subject knowledge and understanding are assessed through essays and assignments prepared to a defined timetable, examination through unseen and seen papers under timed conditions requiring written essays and/or multiple choice questions and through presentation of a research project carried out over a prolonged period and involving primary data collection or extensive synthesis of secondary data. Optional units may additionally assess these areas through oral presentation and/or written reports.

## **Intellectual Skills:**

Intellectual skills are assessed through essays and written assignments, examination and especially by the independent research project involving primary data collection or extensive synthesis of secondary data.

## Subject specific skills:

Specific subject skills are assessed through essays, written assignments and examination. C2-C4 are additionally assessed by the independent research project involving primary data collection or extensive synthesis of secondary data.

#### Transferable skills:

The research project assesses, either directly or indirectly, all of the transferable skills (D1-D8). D1 and D2 are not formally assessed but are demonstrated by the student's ability to meet deadlines effectively

		Pro	gram	ıme l	nten	ded I	Learr	ing (	Outco	mes																	
	Units	Α	Α	Α	Α	Α	В	В	В	В	В	В	С	С	С	С	С	С	С	D	D	D	D	D	D	D	D
		1	2	3	4	5	1	2	3	4	5	6	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
	Cultural Ecology	Χ	Χ		Χ		Χ				Χ			Χ			Χ	Χ	Χ		Χ	Χ	Χ	Χ			
	Independent Research Project	Χ	Χ		Χ			Х	Χ	Χ	Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ
	Archaeological Management	Χ	Χ		Χ	Χ								Χ		Χ	Χ	Χ	Χ			Χ	Χ	Χ			
	Later Prehistory of Britain		Χ	Χ	Χ						Χ						Χ	Χ	Χ			Χ	Χ	Χ			
EL 6	Seekers Believers and Iconoclasts Sociology of thought		Х	Х	х		х				Х						Х	Х	Х		х	Х	Х	х			
LEVEL	Animals and Society		Χ		Х		Χ				Χ						Х	Χ	Χ			Χ	Χ	Х			
_	Food, Culture and Travel		Χ	Χ	Х						Χ						Х		Χ		Х	Χ	Χ	Х			
	Sarup to Stonehenge: Neolithic and Chalcolithic Northwest Europe		Х	Х	х						Х						Х	Х	Х			Х	Х	х			
	International Intervention		Χ	Χ	Χ		Х				Χ						Χ	Χ	Χ			Χ	Х	Х			
	Roman Britain		Χ	Х	Х						Χ						Х	Х	Χ			Х	Χ	Х			
	Themes in Archaeology and Anthropology			Х	Х	Х					Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х			
	Becoming Human				Х						Х						Х	Х	Х			Х	Х	Х			
	Understanding Cultures					Χ	Х				Х						Х	Х	Х	Х	Х	Х	Х	Х			
ιO	Archaeological Science		Х		Х	Х						Х		Х	Х	Х	Х	Х	Х			Х	Х	Х			
LEVEL	Field and Research Skills	Χ				Х						Х		Х	Х	Х	Х	Х	Х	Х		Х	Х	Х			
LE	Maritime Archaeology and Anthropology		Х	Х	Х												Х	Х	Х			Х	Х	Х			
	Societies of Prehistoric Europe		Х	Х	Х		Х										Х	Х	Х			Х	Х	Х			
	Growing up and growing old		Χ								Χ						Х	Х	Χ		Х	Х	Χ	Х			
	Rome and Barbarian Europe		Χ	Х	Х												Х	Х	Χ			Х	Χ	Х			
	Post Evacuation Skills	Χ	Х			Χ		Х					Х	Х	Х	Χ	Х	Х	Χ	Х	Х	Х	Χ	Х			
	AAFS Study Skills	Χ					Χ		Χ							Χ	Х	Χ	Χ	Х	Χ	Х	Χ	Χ	Х	Х	Χ
4	Ancient Peoples and Places	Χ	Χ	Х	Х							Х					Х				Х	Х	Χ	Х			
	Introduction to Anthropology	Χ		Х	Х		Х	Х			Χ	Х			Х	Χ	Х	Х	Х		Х	Х	Χ	Х			
LEVEL	Approaches to Archaeology	Χ	Χ			Χ		Х				Х			Х		Х	Х	Х			Х	Χ	Х			
_	Gathering Time	Χ										Х					Х	Х	Х			Х	Х	Х			
	Archaeological Practice	Χ										Х		Χ		Χ	Х	Χ	Χ			Х	Χ	Χ			

#### Subject knowledge and understanding - students will be expected to:

- A1. Demonstrate knowledge and understanding of evidence, theories, concepts and principles relevant to the practice of archaeology and social and biological anthropology
- $\textbf{A2.} \ Have \ a \ detailed \ knowledge \ and \ understanding \ of evidence, theories, concepts \ and \ discourse \ in \ students' \ areas \ of \ specialisation \ within the \ programme$
- $\textbf{A3}. \ Have a sound knowledge of the range of cultural diversity in the past and contemporary world and its temporal and geographical patterning and the sound of the range of cultural diversity in the past and contemporary world and its temporal and geographical patterning and the sound of the range of cultural diversity in the past and contemporary world and its temporal and geographical patterning and the sound of the range of cultural diversity in the past and contemporary world and its temporal and geographical patterning and the sound of the range of cultural diversity in the past and contemporary world and its temporal and geographical patterning and the sound of the sound of$
- A4. Understand the historical development and multidisciplinary nature of archaeology and social and biological anthropology and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms
- A5. Contextualise their subject-specific knowledge and understanding within the legal frameworks and professional and ethical guidelines onditioning archaeological and social and biological anthropological practice

#### B. Intellectual Skills - students will be expected to:

- **B1.** Identify and critically evaluate routine and unfamiliar problems in archaeological and social and biological anthropological contexts and apply a range of knowledge and skills to develop and implement practical research and solutions and evaluate their outcomes
- B2. Analyse and synthesise information relevant to archaeological and social and biological anthropological issues
- B3. Plan, execute and report on a piece of original research
- **B4.** Integrate evidence from a range of sources to support findings and hypotheses
- B5. Critically analyse published work in archaeology and social and biological anthropology and be able to critically assess the merits and limitations of competing explanations of human diversity and behaviour
- B6. Engage in reasoned, critical and articulate discussions based on a range of appropriate scholarly sources

#### C. Subject-specific skills - students will be expected to:

- $\textbf{C1}. \ Identify appropriate archaeological and social and biological anthropological questions and problems for investigation$
- C2. Undertake field, laboratory and desk-based work, selecting and applying safely appropriate field, laboratory and analytical equipment and methods for archaeological and social and biological anthropological investigation and observing and recording results accurately
- C3. Consider the ethical implications of archaeological and social and biological anthropological research in a variety of applied research settings
- C4. Integrate archaeological and social/biological anthropological information and analyse and interpret results objectively using an appropriate range of qualitative and/or quantitative methodologies in a reflective and critical manner
- C5. Prepare reports and presentations on archaeological and social/biological anthropological research to professional standard in a range of effective and appropriate formats
- C6. Make effective use of the archaeological and social/biological anthropological literature and other sources of information
- C7. Make effective use of IT and software packages relevant to archaeology and social and biological anthropology

#### D. Transferable skills - students will be expected to:

- D1. Work in collaboration with others, including staff and students, and negotiate across differences such as organisational and professional boundaries and differences of identity or language
- D2. Demonstrate sensitivity to the values and interest of others, taking into account different normative and moral positions
- D3. Communicate effectively by oral, written and visual means
- D4. Demonstrate problem solving skills and the application of knowledge across discipline areas
- $\textbf{D5.} \ \ \textbf{Use IT including the Web, spreadsheets, databases and word processing}$
- D6. Use a variety of techniques to gather and retrieve information and data and assess the reliability and relevance of the information gathered.
- D7. Identify and work towards targets for personal, career, and academic development
- D8. Be independent and reflective learners

## BSc (Hons) Archaeological, Anthropological and Forensic Sciences.

#### PROGRAMME DIAGRAM BSc (Hons) Archaeological, Anthropological and Forensic **Sciences** Year 4/Level 6 Exit qualification: BSc (Hons) Choose **ONE** of the following Archaeological. options: **Anthropological and Forensic** Core units (Compulsory) Animals and Society (20) Sciences\* Forensic Practice (20) Sandwich UG programme: Advanced Forensic Science Primate Behaviour Ecology Requires 120 Level 6 credits, 120 (20)Level 5 credits and 120 Level 4 The Science of Human Roman Britain (20) credits and successful completion Remains (20) Sarup to Stonehenge: of a placement year Archaeological Management Neolithic and Chalcolithic Standard UG programme: Requires 120 Level 6 credits, 120 Northwest Europe (20) Level 5 credits and 120 Level 4 Independent Research credits \* Project (40) Year 3/Level P **Progression requirements** Optional placement year in industry/business Satisfactory completion of a minimum of 30 weeks of work in industry/business Year 2/Level 5 Choose **TWO** of the following options: Core units (Compulsory) **Progression requirements** Archaeological Science (20) Requires 120 credits at Level Becoming Human (20) Crime Scene (20) **Environmental Archaeology** Field and Research Skills Exit qualification: Dip HE Archaeological, Introduction to Toxicology Forensic Science (20) Anthropological and (20)**Forensic Sciences** Requires 120 Level 5 credits and 120 Level 4 credits Year 1/Level 4 **Progression requirements** Core units (Compulsory) Chemistry (20) Requires 120 credits at Level Introduction to Forensic Investigation (20) Exit qualification: Cert HE AAFS Study Skills (20) Archaeological, Archaeological Practice (20) Anthropological and Introduction to Social **Forensic Sciences** Anthropology (20) Requires 120 Level 4 credits **Studying Ancient Materials** (20)

<sup>\*</sup>One short placement as an alternative to the optional minimum 30 week placement – Pass/Fail. Failure of a placement which is specified as a programme exit requirement will require a repeat placement/alternative placement.

## BSc (Hons) Archaeological, Anthropological and Forensic Sciences

#### Introduction

This degree has been specifically designed with the aim of preparing for an archaeological, anthropological and / or forensic science, or a more general applied sciences career path. It introduces the application of science in archaeological, anthropological and forensic contexts. The degree draws upon BU's international reputation in both traditional and forensic archaeology and in the forensic sciences and it is currently recognised by the Chartered Society for Forensic Sciences. Students will be able to gain valuable experience through placement in the UK or abroad (a short placement of five weeks, or the option of a long placement (a minimum of 30 weeks)).

Increased professionalism, together with developments in science and technology, mean that the archaeological, anthropological and forensic fields require high quality scientists to be available to work within these disciplines. There has also been a great increase in the application of forensic archaeology within the expanding arena that is medico-legal forensic science, which now encompasses disaster victim recovery and identification in the aftermath of terrorist attacks and natural disasters.

In level 4, students will receive a good grounding in scientific literacy alongside academic and laboratory skills by studying units on chemistry, archaeological practice, introduction to forensic investigation and the skills required to collect archaeological data. These skills are transferable to anthropological and forensic investigation scenarios.

In level 5, an excavation field school is undertaken during the summer, whilst other core units include forensic and archaeological sciences and crime scene investigations. These are balanced with options covering archaeological, anthropological and forensic strands of the programme.

In level 6, the programme culminates with the core units of Advanced Forensic Science, the Science of Human Remains and Archaeological Management and the Independent Research Project (dissertation) together with an option unit from either archaeological, anthropological or forensic science strands of study in order to enhance a particular set of interests or career development pathways.

## **AIM OF THE PROGRAMME**

This programme provides opportunities for students to develop and demonstrate knowledge, understanding and skills that will allow them to work in archaeology, anthropology and other areas of applied science, as well as contribute to forensic practice.

The primary aim of this programme is the development of graduates who:

- Have a critical understanding of the scientific, theoretical and practical basis of archaeological, anthropological and forensic practice and interpretation
- Can apply the acquired range of skills and knowledge to specific archaeological, anthropological and forensic problems, and also communicate effectively with those working in these professions and with the wider public
- Have the necessary professional knowledge and management skills to develop successful careers in the specialist fields of archaeology, anthropology and forensic science
- Have the ability to carry out independent investigations in the area of archaeology and applied science
- Have the skills and knowledge necessary for postgraduate study
- Have qualifications to join the appropriate professional body at levels appropriate to their experience.

The degree also aims to provide students with a substantial range of transferable skills in communication, working with people, field and laboratory practice, computing, data analysis, problem analysis, research design and project management. These provide a basis for professional activity and development that may be applicable in other career areas.

## **OVERALL PROGRAMME OUTCOMES**

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

## Subject knowledge and understanding - students will be expected to:

- A1. Understand evidence, theories, concepts and principles relevant to archaeology, anthropology and forensic science
- A2. Demonstrate a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme
- A3. Understand the multidisciplinary nature of archaeology, anthropology and forensic science and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms
- A4. Demonstrate knowledge and understanding of science and practice relevant to archaeology, anthropology and forensic practice
- A5. Contextualise this knowledge and understanding within professional and ethical guidelines which regulate academic archaeological, anthropological and forensic practice.

## Intellectual Skills - students will be expected to:

- B1. Evaluate critically, apply scientific knowledge and skills in the development and implementation of practical solutions in archaeology, anthropology and forensic science
- B2. Analyse and synthesise scientific information relevant to archaeological, anthropological and/or forensic issues
- B3. Apply appropriate knowledge and skills in the development and implementation of approaches to solving archaeological, anthropological or forensic problems, and to evaluate their outcomes
- B4. Plan, execute and report on a piece of original research
- B5. Integrate evidence from a range of sources to support findings and hypotheses
- B6. Critically analyse published work in archaeology, anthropology and forensic science and related subjects.

## Subject-specific skills - students will be expected to:

- C1. Identify and use safely appropriate laboratory and field methods
- C2. Observe, record accurately and report laboratory and field activity
- C3. Use spatial technologies in addressing problems efficiently
- C4. Prepare technical reports and presentations
- C5. Present research findings in a range of effective and appropriate formats

- C6. Make effective use of the relevant academic literature and other sources of information
- C7. Make effective use of IT and software packages relevant to the programme.

## Transferable skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word processing
- D3. Apply a range of basic statistical tests on experimental and fieldwork data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners

## LEVEL 4 OUTCOMES – CERT HE BSc (HONS) ARCHAEOLOGICAL, ANTHROPOLOGICAL AND FORENSIC SCIENCES

## **Subject knowledge and understanding -** students will be expected to have:

- A1. An appreciation of fundamental scientific practice and themes in the applied sciences
- A2. A knowledge and understanding of archaeological, anthropological and forensic practice and thinking
- A3. Obtained a range of practical laboratory and fieldwork experience and skills
- A4. Obtained a range of academic skills, including academic writing, referencing and statistical analysis
- A5. Demonstrated a knowledge and understanding of chemistry
- A6. Demonstrated a knowledge and understanding of human anthropology.

## **Learning and Teaching Methods and Strategies**

Core knowledge and understanding is acquired through lectures, laboratory sessions, fieldwork, workshops and tutorials. Students will be expected to use published sources to investigate a range of key concepts in science that underpin its forensic, archaeological and anthropological application.

## **Assessment**

Core knowledge is assessed through field and laboratory reports, unseen examinations and written assignments (A1-A6).

## Intellectual Skills - students will be expected to:

- B1. Analyse numerical data and identify appropriate statistical tests
- B2. Recognise situations in which science may be usefully applied in applied science investigations
- B3. Identify and utilise appropriate information sources
- B4. Demonstrate an awareness of the scientific method
- B5. Demonstrate an awareness of academic method.

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

#### Assessment

Intellectual skills are assessed through field and laboratory reports, unseen examinations and written assignments (B1-B5).

## Subject specific skills - students will be expected to:

- C1. Observe, record accurately and report laboratory activity
- C2. Use laboratory and crime scene equipment to generate data and gather forensic evidence
- C3. Recognise the importance and value of certain materials which constitute forensic evidence
- C4. Write appropriately structured reports
- C5. Discover and recognise the archaeological significance of material remains and landscapes
- C6. Interpret spatial data, integrating theoretical models, traces surviving in present-day landscapes, and excavation data

## Learning and Teaching Methods and Strategies

Specific subject outcomes are attained through lectures, practical sessions, workshops, and tutorials. Additional support in the area of library skills is provided by the Subject Librarian during the first term.

### **Assessment**

Subject specific skills are assessed through field and laboratory reports (C1- C4), unseen examinations, fieldwork (C5-C6) and written assignments (C1-C4).

## Transferable skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word-processing
- D3. Apply a range of basic statistical tests to experimental and crime scene data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners
- D7. Prepare effective written communications for different readerships.

## **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level 4. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 4 units and

through individual learning that is supported by University-wide workshops offered by Academic Services.

#### **Assessment**

Effective communication of ideas is an important criterion in the assessment of all student work and in some units are additionally assessed through oral presentations and tests (D1-2& 7). D3 is assessed through specialist reports, while elements of the chemistry unit allow assessment of D4. D5 is assessed though coursework and examinations elements of a number of Level 4 units. D6 is assessed via the AAFS Study Skills unit.

## LEVEL 5 OUTCOMES - DIP HE ARCHAEOLOGICAL, ANTHROPOLOGICAL AND FORENSIC SCIENCES

Subject knowledge and understanding - students will be expected to have:

- A1. An appreciation of the interdisciplinary and multidisciplinary nature of archaeological and anthropological sciences
- A2. An understanding of the applicability and multidisciplinary nature of forensic science
- A3. A knowledge and understanding of human diversity and intellectual issues relating to the study of human skeletal remains
- A4. Demonstrated knowledge of the range of analytical techniques employed in forensic science and more specialist areas of scientific application (DNA, Ballistics)
- A5. An appreciation of the importance of the recovery of primary data through practical experience
- A6. An understanding of analogy and experiment in archaeological analysis.

## **Learning and Teaching Methods and Strategies**

Knowledge and understanding is acquired through lectures, tutorials, practical sessions and group work activities. Students will be expected to review published sources to investigate a range of key concepts and case study material.

## Assessment

Core knowledge is assessed through tests and laboratory reports, lab-based examinations, unseen examinations, seminars, critical reviews (A2) and written assignments (A1-A6).

**Intellectual Skills** - students will be expected to:

- B1. Marshal and critically appraise other people's arguments
- B2. Generate and test hypotheses based on scientific data
- B3. Produce logical and structured arguments supported by relevant evidence
- B4. Exercise judgment in using appropriate methods of data analysis and statistical inquiry
- B5. Apply appropriate scholarly, theoretical and scientific principles and concepts to archaeological, anthropological and forensic problems.

### **Learning and Teaching Methods and Strategies**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

#### **Assessment**

Intellectual skills are assessed through tests and laboratory reports, lab-based examinations, unseen examinations, seminars, critical reviews (B1) and written assignments. B5 is also assessed through research design.

## Subject specific skills - students will be expected to:

- C1. Use appropriately and safely laboratory and field equipment with a view to maintaining scientific rigour
- C2. Observe and accurately record activity within the laboratory
- C3. Discover and recognise the various types and value of archaeological and anthropological evidence
- C4. Select and apply appropriate statistical techniques with a view to data presentation
- C5. Prepare scientific reports and presentations.

## **Learning and Teaching Methods and Strategies**

Specific subject outcomes are attained through lectures, practical sessions, workshops, visits to forensic laboratories and police stations, and tutorials. Additional support in the area of library skills is provided by the Subject Librarian.

#### **Assessment**

Subject Specific skills are assessed through laboratory reports, lab-based examinations, unseen examinations, seminars, critical reviews and written assignments (C1-C5).

## Transferable skills - students will be expected to:

- D1. Be reflective learners by analysing their strengths and weaknesses
- D2. Communicate effectively both in written and oral form
- D3. Work effectively in teams
- D4. Demonstrate problem-solving skills
- D5. Plan and design a programme of primary research, working independently.

## **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced during Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 5 units and through individual learning that is supported by university-wide workshops offered by Academic Services.

## Assessment

Effective communication of ideas is an important criterion in the assessment of all student work and some units include oral presentations in addition to written work. A variety of modes of assessment including case studies and unseen examinations are also used (D1-D5)

## LEVEL 6 OUTCOMES – BSc (Hons) ARCHAEOLOGICAL, ANTHROPOLOGICAL AND FORENSIC SCIENCES

**Subject knowledge and understanding -** students will be expected to have:

- A1. A knowledge of the issues, practicalities and techniques involved in archaeology, biological anthropology and forensic science
- A2. A critical understanding of the theoretical and ethical issues involved in archaeology, biological anthropology and forensic science
- A3. An in-depth knowledge of the multidisciplinary nature of forensic, biological anthropology, and archaeological science
- A4. Demonstrated a knowledge of the specific field and laboratory techniques employed to locate, collect and analyse archaeological, anthropological and forensic evidence
- A5. Demonstrated a detailed knowledge and understanding of archaeology, anthropology and/or forensic science in a chosen specialised area.

Knowledge and understanding is acquired through lectures, tutorials, practical sessions and group work activities and research project meetings. Students will be expected to review published sources to investigate a range of key concepts and case study material. In some cases, they will be involved in collecting their own data or being given realistic data. Students will be expected to undertake research and/or interpret data as part of the research project.

#### **Assessment:**

Subject knowledge and understanding is assessed through professional reports, oral presentations, laboratory assessments, group work, written assignments and unseen-examinations (A1-A4). A5 is assessed through the research project.

## Intellectual Skills - students will be expected to:

- B1. Critically evaluate and review information from a range of sources
- B2. Apply appropriate scientific research methodologies
- B3. Define problems, devise and evaluate possible solutions
- B4. Apply critically, knowledge to specific situations.

## **Learning and Teaching Methods and Strategies:**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support services offer sessions in, for example, library and study skills.

#### **Assessment:**

The intellectual skills are assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (B1-B4). B4 is additionally assessed through the research project.

## Subject specific skills - students will be expected to:

- C1. Present an independent research project with limited reliance on guidance
- C2. Relate original research findings to existing literature and the archaeological or anthropological context
- C3. Recognise, observe and describe different classes of scientific data in forensic, archaeological and anthropological contexts.

## Learning and Teaching Methods and Strategies:

Subject specific outcomes are attained through lectures, group exercises that may include practical sessions and workshops, and the independent research project (IRP). The project supervisor provides specific support for the student and, where appropriate, technical support is also provided.

#### Assessment:

Specific subject skills are assessed through professional reports, oral presentations, laboratory assessments, written assignments and unseen-examinations (C1-C3). C2 is additionally assessed through the independent research project.

## Transferable skills - students will be expected to:

- D1. Undertake self-management and personal organisation (e.g. time management)
- D2. Work under pressure to meet deadlines
- D3. Communicate effectively
- D4. Demonstrate problem-solving skills and the application of knowledge
- D5. Recognise and respect the views of others
- D6. Work both independently, and with others.

## Learning and Teaching Methods and Strategies:

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. Project meetings also provide the forum for debate, development and the exchange of ideas.

#### Assessment:

The research project assesses, either directly or indirectly, all of the transferable skills (D1-D6). Some elements may not be formally assessed but are demonstrated by the student's ability to meet deadlines.

## **Subject knowledge and understanding - students will be expected to:**

- A1. Understand evidence, theories, concepts and principles relevant to archaeology, anthropology and forensic science
- A2. Demonstrate a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme
- A3. Understand the multidisciplinary nature of archaeology, anthropology and forensic science and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms
- A4. Demonstrate knowledge and understanding of science and practice relevant to archaeology, anthropology and forensic practice
- A5. Contextualise this knowledge and understanding within professional and ethical guidelines which regulate academic archaeological and forensic practice.

## Intellectual Skills - students will be expected to:

B1. Evaluate critically, apply scientific knowledge and skills in the development and implementation of practical solutions in archaeology, anthropology and forensic science

- B2. Analyse and synthesise scientific information relevant to archaeological, anthropological and/or forensic issues
- B3. Apply appropriate knowledge and skills in the development and implementation of approaches to solving archaeological, anthropological or forensic problems, and evaluate their outcomes
- B4. Plan, execute and report on a piece of original research
- B5. Integrate evidence from a range of sources to support findings and hypotheses
- B6. Critically analyse published work in archaeology and forensic science and related subjects.

## Subject-specific skills - students will be expected to:

- C1. Identify and use safely appropriate laboratory and field methods
- C2. Observe, record accurately and report laboratory and field activity
- C3. Use spatial technologies in addressing problems efficiently
- C4. Prepare technical reports and presentations
- C5. Present research findings in a range of effective and appropriate formats
- C6. Make effective use of the relevant academic literature and other sources of information
- C7. Make effective use of IT and software packages relevant to the programme.

## Transferable skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word processing
- D3. Apply a range of basic statistical tests on experimental and fieldwork data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners.

# BSc (Hons) Archaeological and Forensic Sciences. Programme Skills Matrix Template Matrix table showing the relationship between ILOs for a programme and its constituent units

		Pro	gram	me Ir	ntend	led Le	earnir	ng Oı	utcon	nes															
	Units	Α	Α	Α	Α	Α	В	В	В	В	В	В	С	С	С	С	С	С	С	D	D	D	D	D	D
		1	2	3	4	5	1	2	3	4	5	6	1	2	3	4	5	6	7	1	2	3	4	5	6
	The Science of Human Remains	Х	Χ	Χ	Χ			Χ	Χ		Χ		Χ		Χ			Χ		Χ	Χ	Χ	Χ		Χ
	Archaeological Management	Χ	Χ	Χ			Χ	Χ	Χ		Χ		Χ		Χ	Χ		Χ		Χ	Χ				Χ
	Independent Research Project		Χ	Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
9	Advanced Forensic Science		Χ	Χ		Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ		Χ	Χ	Χ		Χ	Χ				Х
FVF	Animals and Society		Χ				Χ				Χ							Χ		Χ	Χ				Χ
ĺ	Forensic Practice		Χ	Χ		Χ					Χ							Χ		Χ	Χ		Χ		Х
	Sarup to Stonehenge: Neolithic and Chalcolithic Northwest Europe		Χ								Χ							Χ		Χ	Χ				Χ
	Roman Britain		Χ								Χ							Χ		Χ	Χ				Х
	Primate Behaviour Ecology	Х		Χ			Χ	Χ		Χ					Χ					Χ	Χ	Χ			Χ
	Archaeological Science		Χ	Χ	Χ			Χ	Χ		Χ	Χ	Χ			Χ		Χ	Χ	Х	Χ	Χ		Χ	Χ
	Crime Scene		Χ	Χ		Χ	Χ	Χ			Χ		Χ	Χ		Χ		Χ		Χ	Χ		Χ		Χ
7.	Field and Research Skills	Х		Χ			Χ	Χ	Χ		Χ		Χ	Χ	Χ	Χ		Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ
FVF	Environmental Archaeology		Χ								Χ		Χ					Χ		Χ	Χ				Χ
Ĺ	Forensic Science	Х	Χ		Χ			Χ			Χ		Χ	Χ		Χ		Χ	Χ	Χ	Χ	Χ	Χ		Χ
	Introduction to Toxicology		Χ	Χ			Χ				Χ							Χ		Χ	Χ				Χ
	Becoming Human	Х		Χ			Χ		Χ	Χ	Χ				Χ	Χ	Χ				Χ		Χ		
	Chemistry		Χ		Χ		Χ	Χ			Χ		Χ	Χ		Χ		Χ		Χ	Χ	Χ	Χ		Χ
4	Introduction to Forensic Investigation	Х	Χ	Χ				Χ			Χ	Χ					Χ	Χ		Χ	Χ		Χ		Χ
=	AAFS Study Skills */**	Х				Χ	Χ	Χ	Х		Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ
FVF	Archaeological Practice	Х	Χ						Χ		Χ		Χ	Χ				Χ		Χ	Χ		Χ		Χ
-	Studying Ancient Materials	Х			Χ		_				Χ		_	Χ				Χ		Х	Х		Χ		Х
	Introduction to Social Anthropology		Χ	Χ	Χ		Χ		Χ		Χ				Χ	Χ	Χ				Χ		Χ		

#### Subject knowledge and understanding - students will be expected to:

- A1. Understand evidence, theories, concepts and principles relevant to archaeology, anthropology and forensic science
- A2. Demonstrate a detailed knowledge and understanding of evidence, theories, concepts and discourse in students' areas of specialisation within the programme
- A3. Understand the multidisciplinary nature of archaeology, anthropology and forensic science and the need to integrate knowledge from a range of subject areas in approaching issues specific to these specialisms
- A4. Demonstrate knowledge and understanding of science and practice relevant to archaeology, anthropology and forensic practice
- A5. Contextualise this knowledge and understanding within professional and ethical guidelines which regulate academic archaeological, anthropological and forensic practice

#### Intellectual Skills - students will be expected to:

- B1. Evaluate critically, apply scientific knowledge and skills in the development and implementation of practical solutions in archaeology, anthropology and forensic science
- B2. Analyse and synthesise scientific information relevant to archaeological and/or anthropological and/or forensic issues
- B3. Apply appropriate knowledge and skills in the development and implementation of approaches to solving archaeological, anthropological or forensic problems, and evaluate their outcomes
- B4. Plan, execute and report on a piece of original research
- B5. Integrate evidence from a range of sources to support findings and hypotheses
- B6. Critically analyse published work in archaeology, anthropology and forensic science and related subjects

#### Subject-specific skills - students will be expected to:

- C1. Identify and use safely appropriate laboratory and field methods
- C2. Observe, record accurately and report laboratory and field activity
- C3. Use spatial technologies in addressing problems efficiently
- C4. Prepare technical reports and presentations
- C5. Present research findings in a range of effective and appropriate formats
- C6. Make effective use of the relevant academic literature and other sources of information
- C7. Make effective use of IT and software packages relevant to the programme

#### Transferable skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word processing
- D3. Apply a range of basic statistical tests on experimental and fieldwork data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners

## **BSc (Hons) Forensic Biology**

#### PROGRAMME DIAGRAM **BSc (Hons) Forensic Biology** Exit qualification: BSc (Hons) Year 4/Level 6 **Forensic Biology Option units** Sandwich UG programme: Core units (Compulsory Choose 1 of the following: Requires 120 Level 6 credits, Independent Research Forensic Toxicology (20) 120 Level 5 credits and 120 Project (LES) (40) Environmental Forensics (20) Level 4 credits and successful Advanced Forensic Science Pathophysiology (20) completion of a placement year Advanced Topics in Genetics And 1 of the following: Standard UG programme: (20)Biomolecules (20) Requires 120 Level 6 credits, Forensic Entomology (20) 120 Level 5 credits and 120 Level 4 credits Year 3/Level P Optional placement year in industry/business **Progression** requirements Satisfactory completion of a minimum of 30 weeks of work in industry/business Year 2/Level 5 Core units (Compulsory) **Option units Progression requirements** Choose 1 of the following: Requires 120 credits at Level Biochemistry (20) Evolutionary Biology (20) Biology for Forensic Sciences Crime Scene (20) Forensic Law and Practice Exit qualification: Dip HE Introduction to Toxicology Forensic Biology Forensic Science (20) (20)Requires 120 Level 5 credits Advanced Cell Biology (20) Case Studies in Forensic and 120 Level 4 credits Science (20) Year 1/Level 4 Core units (Compulsory) Progression requirements Chemistry (20) Requires 120 credits at Level Introduction to Forensic Investigation (20) Cell Biology (20) Exit qualification: Cert HE Human Anatomy and Forensic Biology Physiology (20) Requires 120 Level 4 credits Diversity of Life (20) Forensic Research Skills (20)

## **BSc (Hons) Forensic Biology**

The rise in the use of forensic sciences by the various court systems around the developed world marks a shift away from reliance upon witness testimony by the courts. The Forensic Sciences Service has been disbanded and its work taken up by a number of providers some directly linked to police forces others independent private companies, the number of these independent companies is increasing. Similarly, there is a need for relevantly trained staff to join the police forces as forensic examiners.

Forensic Biology is a relatively new discipline, drawing principally from traditional sciences such as chemistry and biology. This programme is aimed at students with a Biological background and a desire to establish a career in forensic science in some capacity. After gaining an understanding and knowledge in relevant law, crime scene science, and biological and chemical analytical techniques, potential students will be able to pursue a career in the highly competitive field of forensic science with a specialism in the Biological aspects, and will have a broad understanding of the principals of scientific enquiry.

## AIMS OF THE PROGRAMME

This programme provides opportunities for students to develop and demonstrate knowledge and understanding, and skills that will allow them to work in areas related to forensic and crime scene science and organisations concerned with any aspect of the medico-legal arena.

This primary aim of this programme is the development of graduates whom:

- Have a critical understanding of the scientific, technical and legal basis of forensic and biological science
- Have the necessary scientific, regulatory and theoretical knowledge to develop careers in areas
  of forensic and crime scene science, and related organisations
- Can evaluate the role of biologically based forensic science within the legal systems of England and Wales, and within International Humanitarian Law
- Recognise the moral and ethical dimensions of their actions and the need for professional codes
  of conduct
- Have the capacity to give a clear and concise account of a related issues and be able to engage in debate and dialogue both with specialists and non-specialists
- Have the skills and knowledge necessary for postgraduate study

The degree also aims to provide students with a substantial range of transferable skills in science laboratory practice, computing, data analysis, report writing and project management as a basis for professional activity and development which may be applicable in other career areas.

## **OVERALL PROGRAMME OUTCOMES**

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

## A. Subject knowledge and understanding - students will be expected to:

- A1. Understand relevant theories, concepts and principles relevant to forensic and human biological science
- A2. Place the scientific knowledge and understanding of forensic & biological science within the UK and International regulatory framework
- A3. Understand the multidisciplinary nature of the forensic & biological sciences and the need to apply knowledge from a range of subject areas
- A4. Analyse critically, published work in the field of biological science in a forensic context

- A5. Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct
- A6. Have knowledge and understanding of the management techniques relevant to crime scene investigations

## B. Intellectual Skills - students will be expected to:

- B1. Evaluate critically, apply scientific knowledge and skills in the development and implementation of practical solutions to biological, crime scene and forensic problems;
- B2. Analyse and synthesise information relevant to the programme
- B3. Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems
- B4. Integrate evidence from a range of sources to support findings and hypotheses
- B5. Plan, execute and report on a project involving original research

## C. Subject-specific skills - students will be expected to:

- C1. Identify and use safely appropriate laboratory and crime scene methods
- C2. Observe, record accurately and report laboratory and crime scene activity
- C3. Use spatial technologies in addressing problems efficiently
- C4. Prepare technical reports and presentations
- C5. Present research findings in a range of effective and appropriate formats
- C6. Make effective use of the relevant academic literature and other sources of information
- C7. Make effective use of IT and software packages relevant to the programme
- C8. Critically analyse and synthesise research data from a wide range of sources and to draw appropriate conclusions

## D- Transferable skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word processing
- D3. Apply a range of basic statistical tests on experimental and fieldwork data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners
- D7. Identify and work towards targets for personal career and academic development

## LEVEL 4 OUTCOMES - Cert. HE; Introduction to Forensic Biology

**Subject knowledge and understanding -** students will be expected to have:

- A1. Awareness of some fundamental themes in the development and practice of forensic science
- A2. An appreciation of the nature and sources of UK and EU law and the regulation of forensic practice
- A3. Demonstrated an understanding of the basic principles underlying chemistry, human anatomy and physiology and of molecular biology
- A4. Demonstrated an awareness of the nature of forensic evidence and its collection at a crime scene
- A5. An appreciation of the moral and ethical dimensions of forensic and biological science practices
- A6. An understanding of crime scene management and investigative techniques

Core knowledge and understanding is acquired through lectures, laboratory sessions, workshops and tutorials. Students will be expected to use on-line, e-learning and published sources to investigate a range of key concepts in forensic biology.

## **Assessment**

Core knowledge is assessed through tests and laboratory reports (A2-3), crime scene reports (A4), unseen examinations and written assignments (A1-A6).

Intellectual Skills - students will be expected to:

- B1. Analyse numerical data and identify appropriate statistical tests
- B2. Identify key areas of the law as they affect issues associated with forensic and human biology
- B3. Identify and utilise appropriate information sources
- B4. Demonstrate an awareness of the scientific method
- B5. Recognise situations in which science can be applied to forensic situations

## **Learning and Teaching Methods and Strategies**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

## Assessment

Intellectual skills are assessed through preparation and analysis of laboratory reports (B1 & B4), unseen examinations and written assignments (B1-B5).

Subject specific skills - students will be expected to:

- C1. Observe, record accurately and report laboratory and crime scene activity
- C2. Use laboratory and crime scene equipment to generate scientific data and gather forensic evidence
- C3. Recognise the importance and value of certain materials which constitute forensic evidence
- C4. Write appropriately cited structured reports

Specific subject outcomes are attained through lectures, practicals, workshops, and tutorials. Additional support in the area of library skills is provided by the Subject Librarian during the first term.

#### **Assessment**

Subject specific skills are assessed through tests and laboratory reports (C1 & C4), crime scene reports (C3), unseen examinations and written assignments (C1-C4).

## Transferable skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means;
- D2. Use IT including the Web, spread sheets, word-processing and e-learning materials
- D3. Apply a range of basic statistical tests to experimental and crime scene data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners

## **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level 4. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 4 units and through individual learning that is supported by University-wide workshops offered by Academic Services.

### Assessment

Effective communication of ideas is an important criterion in the assessment of all student work and in some units is additionally assessed through oral presentations (D1). D2 and D3 are assessed through specialist reports, while elements of the biology and chemistry units allow assessment of D4. D5 is assessed though coursework and examinations elements of a number of Level C units.

## LEVEL 5 OUTCOMES - Dip. HE Forensic Biology

## **Subject knowledge and understanding -** students will be expected to have:

- A1. An appreciation of the interdisciplinary and multidisciplinary nature of forensic biology
- A2. Demonstrated a knowledge of the criminal legal system, and human rights law, and how these regulate forensic practice and the expert witness
- A3. A knowledge and understanding of human diversity and intellectual issues relating to the study of human skeletal remains
- A4. Demonstrated a knowledge of the range of analytical techniques employed in forensic science and more specialist areas of scientific application i.e. genetics, toxicology and biochemistry
- A5. An appreciation of the moral and ethical issues that surround data analysis in human biological and forensic sciences
- A6. A knowledge of research methods relevant to forensic and crime scene science

Knowledge and understanding is acquired through lectures, tutorials, practicals and group work activities. Students will be expected to review published sources to investigate a range of key concepts and case study material.

#### Assessment

Core knowledge is assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (A1-A6).

## Intellectual Skills - students will be expected to:

- B1. Marshal and critically appraise other people's arguments
- B2. Generate and test hypotheses based on scientific data
- B3. Produce logical and structured arguments supported by relevant evidence
- B4. Exercise judgement in using appropriate methods of data analysis and statistical enquiry
- B5. Evaluate the current regulatory framework

## Learning and Teaching Methods and Strategies

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

#### **Assessment**

Intellectual skills are assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (B1-B5).

## Subject specific skills - students will be expected to:

- C1. Use appropriately and safely laboratory equipment with a view to the presentation of results within the court of law
- C2. Observe and accurately record activity within the laboratory
- C3. Discover and recognise the various types and value of science based evidence
- C4. Select and apply appropriate statistical techniques with a view to data presentation within a court of law
- C5. Prepare scientific reports and presentations

## **Learning and Teaching Methods and Strategies**

Specific subject outcomes are attained through lectures and tutorials, practicals, workshops, visiting speakers and visits to laboratories and Police facilities, Additional support in the area of library skills is provided by the Subject Librarian during the first term

#### Assessment

Subject Specific skills are assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (C1-C5).

## Transferable skills - students will be expected to:

- D1. Be reflective learners by analysing their strengths and weaknesses
- D2. Communicate effectively both in written and oral form
- D3. Work effectively in teams

D4. Demonstrate problem-solving skills and the use of appropriate mathematical and statistical skills

## **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in the Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 5 units and through individual learning that is supported by University-wide workshops offered by Academic Services.

#### Assessment

Effective communication of ideas is an important criterion in the assessment of all student work and in some units is additionally assessed through oral presentations (D1). D2 and D3 are assessed, for example, through specialist reports as well as examinations.D4 is likely to be a part of all or most of the units studied at this level

## LEVEL 6 OUTCOMES - BSc (Hons) Forensic Biology

Subject knowledge and understanding - students will be expected to have:

- A1. Demonstrated a knowledge of the issues, practicalities and techniques involved in forensic science and forensic biology including in the interpretation of results
- A2. Shown evidence of a critical understanding of the moral and ethical issues that surround the use of chemical and biological information in forensic science and the need for professional codes of conduct
- A3. Demonstrated a knowledge of the legal and regulatory framework within forensic science and forensic biological science
- A4. Shown a knowledge of the specific field and laboratory techniques employed to; locate, collect and analyse forensic evidence and modern human skeletal remains, generate complex genetic information
- A5. Demonstrated detailed knowledge and understanding of forensic biological science in a chosen specialised area

## **Learning and Teaching Methods and Strategies**

Knowledge and understanding is acquired through lectures, tutorials, practicals and group work activities and research project meetings. Students will be expected to review published sources to investigate a range of key concepts and case study material. In some cases, they will be involved in collecting their own data or being given realistic data related to forensic and/or crime scene science. Students will be expected to undertake their own research as part of the directed or independent research project.

## **Assessment**

Subject knowledge and understanding is assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (A1-A4). A5 is assessed through a research project.

Intellectual Skills - students will be expected to:

- B1. Critically evaluate and review information from a range of sources
- B2. Apply appropriate scientific research methodologies
- B3. Define problems, devise and evaluate possible solutions

B4. Apply critically, knowledge to specific situations

## **Learning and Teaching Methods and Strategies**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

## **Assessment**

The intellectual skills are assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (B1-B4). B4 is additionally assessed through a research project.

## Subject specific skills - students will be expected to:

- C1. Engage in a directed or independent project including where appropriate the use of relevant statistical tests, with limited reliance on guidance
- C2. Relate research findings to existing literature and the forensic context
- C3. Be aware of the ethical and health and safety issues related to work within the forensic biology arena

## **Learning and Teaching Methods and Strategies**

Subject specific outcomes are attained through lectures, group exercises that may include practicals and workshops, and the research project. The project supervisor provides specific support for the student and where appropriate, technical support is also provided.

## **Assessment**

Specific subject skills are assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (C1-C3). C2 is additionally assessed through a research project.

## **Transferable skills -** students will be expected to:

- D1. Undertake self-management and personal organisation (e.g. time management)
- D2. Work under pressure to meet deadlines
- D3. Communicate effectively both orally and in writing
- D4. Demonstrate problem-solving skills and the application of knowledge
- D5. Recognise and respect the views of others
- D6. Work both independently, and with others

## **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level I. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. project meetings also provide the forum for debate, development and the exchange of ideas.

#### **Assessment**

The research project assesses, either directly or indirectly, all of the transferable skills (D1-D6). Some elements may not be formally assessed but are demonstrated by the student's ability to meet deadlines.

**BSc (Hons) Forensic Biology Programme Skills Matrix** 

										F	rogra	amm	e Inte	ende	d Lea	arnin	g Out	tcom	es								
		Α	Α	Α	Α	Α	Α	В	В	В	В	В	С	С	С	С	С	С	С	С	D	D	D	D	D	D	ı
	Units	1	2	3	4	5	6	1	2	3	4	5	1	2	3	4	5	6	7	8	1	2	3	4	5	6	-
	Environmental Forensics	Х		Х	Х		Х								Х						Х						Х
	Forensic Toxicology		Х		Х		Х						Х														Х
	Advanced Topics in Genetics	х	Х	Х				Х	Х			Х	Х	Х		Х		Х							Х		Х
9 le	Independent Research Project (LES)		Х					Х	Х	Х	Х	Х			Х		Х		Х	Х	Х	Х	Х			Х	Х
ě	Advanced Forensic Science		Х			Х		Х					Х	Х		Х	Х			Х	Х				Х		Х
_	Biomolecules			Х				Х					Х														Х
	Pathophysiology	х	Х	х									Х	Х											Х		>
	Forensic Entomology	х		х	Х		Х	Х	Х	Х			Х	Х		Х	Х	Х	Х		Х	Х			Х	Х	Х
		•																									
	Biochemistry												Х					Х									T
	Crime Scene	х											Х	Х				Х									
	Forensic Law and Practice		Х			Х		Х										Х		Х							
2	Forensic Science	х					Х		Х	Х			Х	Х		Х		Х	Х			Х	Х	Х			
Ve	Introduction to Toxicology			Х	Х		Х	Х										Х									Ī
۳	Case Studies in Forensic Science				Х		Х		Х		Х							Х									
	Advanced Cell Biology	х			Х								Х	Х				Х									
	Evolutionary Biology	х				Х				Х			Х					Х									Ī
	Biology for Forensic Sciences	Х		Х	Х	Х		Х	Х	Х			Х	Х		Χ	Х	Х	Х		Х	Х			Х	Х	2
	Chemistry			Х				Х	Х				Х	Х		Х		Х				Х	Х	Х			
	Introduction to Forensic Investigation	х		Х	Х				Х	Х	Х						Х	Х						Х			
4	AAFS Study Skills	х							Х	Х	х				Х	Х	Х	Х	Х	х	Х	Х			Х	х	
ve	Human Anatomy and Physiology		Х	Х					Х									Х						Х			
Le	Cell Biology			Х					Х					Х		Х		Х			Х			Х			
	Diversity of Life			Х				Х	Х				Х	Х				Х						Х			Ī

A - Subject Knowledge and Understanding	C - Subject-specific/Practical Skills										
1 Understand relevant Theories , concepts & principles relevant to forensic & human biological science	1 identify and use safely appropriate laboratory and crime scene methods;										
2 Place the scientific knowledge and understanding of forensic and biological science within the UK and International regulatory framework	2 observe, record accurately and report laboratory and crime scene activity;										
3 understand the multidisciplinary nature of forensic science and biological sciences and the need to apply knowledge from a range of areas	3 use spatial technologies in addressing problems efficiently										
4 analyse critically, published work in the field of biological-science in a forensic context	4 prepare technical reports and presentations										
5 recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct;	5 present research findings in a range of effective and appropriate formats										
6 have knowledge and understanding of the management techniques relevant to crime scene investigations	6 Make effective use of the relevant academic literature and other sources of information										
	7 Make effective use of IT- and Software packages relevant to the Programme										
B - latellectual Skills	8 critically analyse and synthesise research data from a wide range of sources and to draw appropriate conclusions										
1 evaluate critically, apply scientific knowledge and skills in the development and implementation of practical solutions to biological, crime scene and forensic problems	D - Transferable Skills										
2 analyse and synthesise information relevant to the programme	1 Communicate by oral, written and visual means										
3 define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems	2 Use IT including the Web, spread sheets and word processing										
· · · · · · · · · · · · · · · · · · ·	2 Use IT including the Web, spread sheets and word processing 3 Apply a range of basic Statistical tests on experimental and fieldwork data										
3 detine probleme and devies and evaluate possible solutions, and to solve both routine and unramiliar problems 4 integrates evidence from a nange of course to support findings and hypotheses; 5 plan, execute and report on a project involving original research.											
4 integrate evidence from a range of sources to support findings and hypotheses;	3 Apply a range of basic Statistical tests on experimental and fieldwork data										
4 integrate evidence from a range of sources to support findings and hypotheses;	3 Apply a range of basic Statistical tests on experimental and fieldwork data 4 Work in collaboration with others, including staff and students										

## **BSc (Hons) Forensic Investigation**

# PROGRAMME DIAGRAM BSc (Hons) Forensic Investigation

#### Year 4/Level 6

## **Core units (Compulsory)**

Independent Research Project (LES) (40) Advanced Forensic Science (20) International Investigations (20)

## Option units Choose 1 of the following:

The Science of Human Remains (20)

Forensic Toxicology (20) Environmental Forensics (20)

## Choose 1 of the following:

Forensic Practice (20) Occupational Health and Safety (20)

# Exit qualification: BSc (Hons) Forensic Investigation Sandwich UG programme:

Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits and successful completion of a placement year

## Standard UG programme:

Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits

## Year 3/Level P

## Optional placement year in industry/business

## Progression requirements

Satisfactory completion of a minimum of 30 weeks of work in industry/business

## Year 2/Level 5

## **Core units (Compulsory)**

Crime Scene (20) Forensic Computing (20) Forensic Law and Practice (20) Forensic Science (20)

Advanced Crime Scene (20)

## Option units Choose 1 of the following:

Geographic Information Systems (20) Introduction to Toxicology (20)

Case Studies in Forensic Science (20)

## **Progression requirements**

Requires 120 credits at Level 5

## Exit qualification: Dip HE Forensic Investigation

Requires 120 Level 5 credits and 120 Level 4 credits

## Year 1/Level 4

## Core units (Compulsory)

Chemistry (20) Introduction to Forensic Investigation (20) Cell Biology (20) Human Anatomy and Physiology (20) Introduction to Forensic Psychology (20)

Forensic Research Skills (20)

## Progression requirements

Requires 120 credits at Level 4

Exit qualification: Cert HE Forensic Investigation Requires 120 Level 4 credits

## **BSc (Hons) Forensic Investigation**

Forensic investigation is a wide ranging subject area, drawing principally from scientific methods and practical training developed from criminal investigation. There is an anticipated increasing demand for graduates with a broad forensic investigative skills set to take part in wider types of investigations such as natural or man-made disasters where forensic skills play a pivotal part in the investigation. The course draws on the university's history of forensic science, crime scene and genocide investigation and disaster management studies.

## AIMS OF THE PROGRAMME

This program provides opportunities for students to develop and demonstrate knowledge, understanding and skills that will enable them to work in areas, where forensic thinking and practical skills are applied in settings such as crime scenes and natural / environmental disasters.

The primary aim of this programme is the development of graduates who:

- Have a critical understanding of the scientific, technical and legal basis of forensic and scene investigation
- Appreciate the importance of the role of scientists at the scene of a crime, disaster or environmental mishap
- Have the necessary scientific, regulatory and theoretical knowledge to develop careers in a forensic or investigative organisation
- Can evaluate the role of the forensic investigator within a legal context and within international law
- Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct
- Have the skills and knowledge necessary for postgraduate study
- Can develop excellent communication skills

The degree also aims to provide students with a substantial range of transferable skills in science laboratory skills, data analysis report writing, project management and computing as a basis for professional activity and development which may be applicable in other career areas.

## INTENDED LEARNING OUTCOMES

## Overall pathway aims

This program provides opportunities for students to develop and demonstrate knowledge as follows:

## A. Subject knowledge and understanding – students will be expected to:

- A1. Understand relevant theories, concepts and principals relevant to forensic, crime and environmental scene science
- A1. Place the scientific knowledge and understanding of forensic investigation techniques within UK and International regulatory frameworks
- A3. Understand the multidisciplinary nature of the forensic investigation and the need to apply knowledge from a range of subject areas
- A4. Analyse critically published work in the areas of forensic science, scene investigation and the need to apply knowledge from a range of subject areas
- A5. Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct

A6. Have knowledge and understanding of the management techniques relevant to a range of forensic and disaster investigation

## **B.** Intellectual skills – students will be expected to:

- B1. Evaluate critically, apply scientific and investigative knowledge and skills in the development and implementation of practical solutions to forensic investigation
- B2. Analyse and synthesise information relevant to the programme
- B3. Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems
- B4. Plan, execute and report on a project involving original research
- B5. Integrate evidence collected from a range of sources to support findings and hypotheses

## C- Subject-specific skills - students will be expected to;

- C1. Identify and apply appropriate scene and laboratory methods
- C2. Observe, record accurately and report laboratory and scene / fieldwork activity
- C3. Use spatial technologies in addressing problems efficiently
- C4. Prepare reports and presentations
- C5. Make effective use of the relevant academic and scientific literature and other sources of information
- C6. Present research findings in a range of effective and appropriate formats
- C7. Make effective use of IT and software packages relevant to the programme

## D-Transferable Skills- students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the WED, spread sheets and word processing
- D3. Apply a range of basic statistical tests on experimental and fieldwork data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners

## LEVEL 4 OUTCOMES - Cert. HE Forensic Investigation

## **Subject knowledge and understanding -** students will be expected to have:

- A1. Awareness of some fundamental themes in the development and practice of forensic science
- A2. An appreciation of the nature and sources of UK and EU law and the regulation of forensic practice

- A3. Demonstrated an understanding of the basic principles underlying forensic investigation, forensic computing, chemistry and biology
- A4. Demonstrated an awareness of the nature of forensic evidence and its collection from a scene under investigation
- A5. An appreciation of the moral and ethical dimensions of forensic practice
- A6. An understanding of crime scene management and investigative techniques

Core knowledge and understanding is acquired through lectures, laboratory sessions, workshops and tutorials. Students will be expected to use published sources to investigate a range of key concepts in forensic and crime scene science.

#### Assessment

Core knowledge is assessed through tests and laboratory reports (A2-3), crime scene reports (A4), unseen examinations and written assignments (A1-A6).

Intellectual Skills - students will be expected to:

- B1. Analyse numerical data and identify appropriate statistical tests
- B2. Identify key areas of the law as they affect forensic issues
- B3. Identify and utilise appropriate information sources
- B4. Demonstrate an awareness of the scientific method
- B5. Recognise situations in which science can be applied to forensic situations

## **Learning and Teaching Methods and Strategies**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

#### Assessment

Intellectual skills are assessed through laboratory reports (B2 & B4), unseen examinations and written assignments (B1-B5).

Subject specific skills - students will be expected to:

- C1. Observe, record accurately and report laboratory and crime scene activity
- C2. Use laboratory and crime scene equipment to generate data and gather forensic evidence
- C3. Recognise the importance and value of certain materials which constitute forensic evidence
- C4. Write appropriately structured reports

## **Learning and Teaching Methods and Strategies**

Specific subject outcomes are attained through lectures, practicals, workshops and tutorials. Additional support in the area of library skills is provided by the Subject Librarian during the first term.

#### **Assessment**

Subject specific skills are assessed through tests and laboratory reports (C1 & C4), crime scene reports (C3), unseen examinations and written assignments (C1-C4).

Transferable skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word-processing
- D3. Apply a range of basic statistical tests to experimental and crime scene data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level 4. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 4 units and through individual learning that is supported by University-wide workshops offered by Academic Services.

### **Assessment**

Effective communication of ideas is an important criterion in the assessment of all student work and in some units is additionally assessed through oral presentations (D1). D2 and D3 are assessed through specialist reports, while elements of the biology and chemistry units allow assessment of D4. D5 is assessed though coursework and examinations elements of a number of Level 4 units.

# LEVEL I OUTCOMES - Dip. HE Forensic Investigation

**Subject knowledge and understanding -** students will be expected to have:

- A1. An appreciation of the interdisciplinary and multidisciplinary nature of forensic science
- A2. Demonstrated a knowledge of the criminal legal system, and human rights law, and how these regulate forensic practice and the expert witness
- A3. A knowledge of advanced crime scene and investigation skills
- A4. Demonstrated a knowledge of the range of analytical techniques employed in forensic science and more specialist areas of scientific application (e.g. forensic computing, chromatography, spectrophotometry)
- A5. An appreciation of the moral and ethical issues that surround data analysis in forensic science
- A6. A knowledge of research methods relevant to forensic and crime scene science

### **Learning and Teaching Methods and Strategies**

Knowledge and understanding is acquired through lectures, tutorials, practicals and group work activities. Students will be expected to review published sources to investigate a range of key concepts and case study material.

### **Assessment**

Core knowledge is assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (A1-A6).

Intellectual Skills - students will be expected to:

- B1. Marshal and critically appraise other people's arguments
- B2. Generate and test hypotheses based on scientific data
- B3. Produce logical and structured arguments supported by relevant evidence
- B4. Exercise judgement in using appropriate methods of data analysis and statistical enquiry
- B5. Evaluate the current regulatory framework
- B6. Evaluate the applications / limitations of the various investigative methods applied to a forensic context

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

# **Assessment**

Intellectual skills are assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (B1-B6).

Subject specific skills - students will be expected to:

- C1. Use appropriately and safely laboratory equipment with a view to the presentation of results within the court of law
- C2. Observe and accurately record activity within the laboratory
- C3. Discover and recognise the various types and value of forensic evidence
- C4. Select and apply appropriate statistical techniques with a view to data presentation within a court of law
- C5. Prepare scientific reports and presentations

# **Learning and Teaching Methods and Strategies**

Specific subject outcomes are attained through lectures, practicals, workshops, visits to forensic laboratories and Police stations, and tutorials. Additional support in the area of library skills is provided by the Subject Librarian during the first term

### **Assessment**

Subject Specific skills are assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (C1-C5).

Transferable skills - students will be expected to:

- D1. Be reflective learners by analysing their strengths and weaknesses
- D2. Communicate effectively both in written and oral form
- D3. Work effectively in teams
- D4. Demonstrate problem-solving skills

# **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in the Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to

communicate their ideas. IT skills are developed through components of some Level 5 units and through individual learning that is supported by University-wide workshops offered by Academic Services.

### **Assessment**

Effective communication of ideas is an important criterion in the assessment of all student work and in some units is additionally assessed through oral presentations (D1). D2 and D3 are assessed, for example, through specialist reports as well as examinations.

# LEVEL 6 OUTCOMES - BSc (Hons) Forensic Investigation

# Subject knowledge and understanding - students will be expected to have:

- A1. Demonstrated a knowledge of the issues, practicalities and techniques involved in forensic, environmental and international investigations and Interpretation of results from these investigations
- A2. A critical understanding of the moral and ethical issues that surround forensic science and the need for professional codes of conduct
- A3. A knowledge of the legal and regulatory frameworks associated with forensic environmental and occupational sciences
- A4. A knowledge of the specific field and laboratory techniques employed to locate, collect and analyse forensic evidence
- A5. Demonstrated detailed knowledge and understanding of forensic, environmental and crime scene management in a chosen specialised area

# **Learning and Teaching Methods and Strategies**

Knowledge and understanding is acquired through lectures, tutorials, practicals and group work activities and research project meetings. Students will be expected to review published sources to investigate a range of key concepts and case study material. In some cases, they will be involved in collecting their own data or being given realistic data related to forensic and/or crime scene science. Students will be expected to undertake their own research as part of the directed or independent research project.

### **Assessment**

Subject knowledge and understanding is assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (A1-A4). A5 is assessed through a research project.

# Intellectual Skills - students will be expected to:

- B1. Critically evaluate and review information from a range of sources
- B2. Apply appropriate scientific research methodologies
- B3. Define problems, devise and evaluate possible solutions
- B4. Apply critically, knowledge to specific situations

# **Learning and Teaching Methods and Strategies**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

### **Assessment**

The intellectual skills are assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (B1-B4). B4 is additionally assessed through a research project.

## Subject specific skills - students will be expected to:

- C1. Engage in a directed or independent project with limited reliance on guidance
- C2. Relate research findings to existing literature and the forensic context
- C3. Be aware of the ethical and health and safety issues related to work within the forensic arena

# **Learning and Teaching Methods and Strategies**

Subject specific outcomes are attained through lectures, group exercises that may include practicals and workshops, and the research project. The project supervisor provides specific support for the student and where appropriate, technical support is also provided.

# **Assessment**

Specific subject skills are assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (C1-C3). C2 is additionally assessed through a research project.

### **Transferable skills -** students will be expected to:

- D1. Undertake self-management and personal organisation (e.g. time management)
- D2. Work under pressure to meet deadlines
- D3. Communicate effectively both orally and in writing
- D4. Demonstrate problem-solving skills and the application of knowledge
- D5. Recognise and respect the views of others
- D6. Work both independently, and with others

# **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. Project meetings also provide the forum for debate, development and the exchange of ideas.

### **Assessment**

The research project assesses, either directly or indirectly, all of the transferable skills (D1-D6). Some elements may not be formally assessed but are demonstrated by the student's ability to meet deadlines

BSc Fore	nsic Inves	stigation Programm	ne Skills M	atrix Temp	olate																						
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### **B\$c (Hons) Forensic Science** PROGRAMME DIAGRAM **BSc (Hons) Forensic Science** Exit qualification: BSc (Hons) Year 4/Level 6 **Forensic Science Option units** Sandwich UG programme: Core units (Compulsory) Choose 1 of the following: Requires 120 Level 6 credits, Independent Research The Science of Human 120 Level 5 credits and 120 Project (LES) (40) Remains (20) Level 4 credits and successful Advanced Forensic Science Environmental Forensics (20) completion of a placement year Forensic Toxicology (20) And 1 of the following: Standard UG programme: Biomolecules (20) Requires 120 Level 6 credits, Forensic Practice (20) 120 Level 5 credits and 120 Level 4 credits Year 3/Level P Optional placement year in industry/business **Progression** requirements Satisfactory completion of a minimum of 30 weeks of work in industry/business Year 2/Level 5 Core units (Compulsory) **Progression requirements Option units** Choose 1 of the following: Requires 120 credits at Level Crime Scene (20) Geographic Information Biochemistry (20) Systems (20) Exit qualification: Dip HE Forensic Law and Practice Case Studies in Forensic Science (20) **Forensic Science** Introduction to Toxicology Advanced Crime Scene (20) Requires 120 Level 5 credits Advanced Cell Biology (20) and 120 Level 4 credits (20)Forensic Science (20) Year 1/Level 4 Progression requirements Core units (Compulsory) Chemistry (20) Requires 120 credits at Level Introduction to Forensic Investigation (20) Cell Biology (20) Exit qualification: Cert HE Human Anatomy and Forensic Science Physiology (20) Requires 120 Level 4 credits Introduction to Forensic Psychology (20) Forensic Research Skills (20)

# **BSc (Hons) Forensic Science**

The rise in the use of forensic sciences by the various court systems around the developed world marks a shift away from reliance upon witness testimony by the courts. The Forensic Sciences Service has been disbanded and its work taken up by a number of providers some directly linked to police forces others independent private companies, the number of these independent companies is increasing. Similarly, there is a need for relevantly trained staff to join the police forces as forensic examiners.

Forensic science is a wide ranging discipline, drawing principally from traditional sciences such as chemistry and biology. This programme is aimed at students with a scientific background and a desire to establish a career in forensic science in some capacity. After gaining an understanding and knowledge in relevant law, crime scene science, and biological and chemical analytical techniques, potential students will be able to pursue a career in the highly competitive field of forensic science, and will have a broad understanding of the principals of scientific enquiry.

# AIMS OF THE PROGRAMME

This programme provides opportunities for students to develop and demonstrate knowledge and understanding, and skills that will allow them to work in areas related to forensic and crime scene science and organisations concerned with any aspect of the medico-legal arena.

This primary aim of this programme is the development of graduates whom:

- Have a critical understanding of the scientific, technical and legal basis of forensic and crime scene science
- Have the necessary scientific, regulatory and theoretical knowledge to develop careers in areas
  of forensic and crime scene science, and related organisations
- Can evaluate the role of forensic science within the legal systems of England and Wales, and within International Humanitarian Law
- Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct
- Have the skills and knowledge necessary for postgraduate study

The degree also aims to provide students with a substantial range of transferable skills in science laboratory practice, computing, data analysis, report writing and project management as a basis for professional activity and development which may be applicable in other career areas.

# **OVERALL PROGRAMME INTENDED LEARNING OUTCOMES**

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

# A. Subject knowledge and understanding - students will be expected to:

- A1. Understand relevant theories, concepts and principles relevant to forensic and crime scene science
- A2. Place the scientific knowledge and understanding of forensic science within the UK and International regulatory framework
- A3 Understand the multidisciplinary nature of the forensic science and the need to apply knowledge from a range of subject areas
- A4 Analyse critically, published work in the field of forensic and crime scene science
- A5 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct

A6. Have knowledge and understanding of the management techniques relevant to crime scene investigations.

### B. Intellectual Skills - students will be expected to:

- B1. Evaluate critically, apply scientific knowledge and skills in the development and implementation of practical solutions to crime scene and forensic problems
- B2. Analyse and synthesise information relevant to the programme
- B3. Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems
- B4. Integrate evidence from a range of sources to support findings and hypotheses
- B5. Plan, execute and report on a project involving original research

# C- Subject-specific skills - students will be expected to:

- C1. Identify and use safely appropriate laboratory and crime scene methods
- C2. Observe, record accurately and report laboratory and crime scene activity
- C3. Use spatial technologies in addressing problems efficiently
- C4. Prepare technical reports and presentations
- C5. Present research findings in a range of effective and appropriate formats
- C6. Make effective use of the relevant academic literature and other sources of information
- C7. Make effective use of IT and software packages relevant to the programme

### **D- Transferable skills** - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word processing
- D3. Apply a range of basic statistical tests on experimental and fieldwork data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners

# LEVEL 4 OUTCOMES - Cert. HE; Introduction to Forensic Science

# **Subject knowledge and understanding -** students will be expected to have:

- A1. Awareness of some fundamental themes in the development and practice of forensic science
- A2. An appreciation of the nature and sources of UK and EU law and the regulation of forensic practice

- A3. Demonstrated an understanding of the basic principles underlying chemistry, human physiology and molecular biology
- A4. Demonstrated an awareness of the nature of forensic evidence and its collection at a crime scene
- A5. An appreciation of the moral and ethical dimensions of forensic practice
- A6. An understanding of crime scene management and investigative techniques

Core knowledge and understanding is acquired through lectures, laboratory sessions, workshops and tutorials. Students will be expected to use published sources to investigate a range of key concepts in forensic and crime scene science.

### Assessment

Core knowledge is assessed through tests and laboratory reports (A2-3), crime scene reports (A4), unseen examinations and written assignments (A1-A6).

Intellectual Skills - students will be expected to:

- B1. Analyse numerical data and identify appropriate statistical tests
- B2. Identify key areas of the law as they affect forensic issues
- B3. Identify and utilise appropriate information sources
- B4. Demonstrate an awareness of the scientific method
- B5. Recognise situations in which science can be applied to forensic situations

### **Learning and Teaching Methods and Strategies**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

# Assessment

Intellectual skills are assessed through laboratory reports (B2 & B4), unseen examinations and written assignments (B1-B5).

**Subject specific skills** - students will be expected to:

- C1. Observe, record accurately and report laboratory and crime scene activity
- C2. Use laboratory and crime scene equipment to generate data and gather forensic evidence
- C3. Recognise the importance and value of certain materials which constitute forensic evidence
- C4. Write appropriately structured reports

### Learning and Teaching Methods and Strategies

Specific subject outcomes are attained through lectures, practicals, workshops, and tutorials. Additional support in the area of library skills is provided by the Subject Librarian during the first term.

### **Assessment**

Subject specific skills are assessed through tests and laboratory reports (C1 & C4), crime scene reports (C3), unseen examinations and written assignments (C1-C4).

**Transferable skills -** students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Use IT including the Web, spread sheets and word-processing
- D3. Apply a range of basic statistical tests to experimental and crime scene data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across discipline areas
- D6. Be independent and reflective learners

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level 4. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 4 units and through individual learning that is supported by University-wide workshops offered by Academic Services.

### **Assessment**

Effective communication of ideas is an important criterion in the assessment of all student work and in some units is additionally assessed through oral presentations (D1). D2 and D3 are assessed through specialist reports, while elements of the biology and chemistry units allow assessment of D4. D5 is assessed though coursework and examinations elements of a number of Level 4 units.

# LEVEL I OUTCOMES - Dip. HE Forensic Science

**Subject knowledge and understanding -** students will be expected to have:

- A1. An appreciation of the interdisciplinary and multidisciplinary nature of forensic science
- A2. Demonstrated a knowledge of the criminal legal system, and human rights law, and how these regulate forensic practice and the expert witness
- A3. A knowledge and understanding of human diversity and intellectual issues relating to the study of human skeletal remains
- A4. Demonstrated a knowledge of the range of analytical techniques employed in forensic science and more specialist areas of scientific application (DNA, Ballistics)
- A5. An appreciation of the moral and ethical issues that surround data analysis in forensic science
- A6. A knowledge of research methods relevant to forensic and crime scene science

### **Learning and Teaching Methods and Strategies**

Knowledge and understanding is acquired through lectures, tutorials, practicals and group work activities. Students will be expected to review published sources to investigate a range of key concepts and case study material.

### **Assessment**

Core knowledge is assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (A1-A6).

Intellectual Skills - students will be expected to:

- B1. Marshal and critically appraise other people's arguments
- B2. Generate and test hypotheses based on scientific data
- B3. Produce logical and structured arguments supported by relevant evidence
- B4. Exercise judgement in using appropriate methods of data analysis and statistical enquiry
- B5. Evaluate the current regulatory framework

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

### Assessment

Intellectual skills are assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (B1-B5).

# Subject specific skills - students will be expected to:

- C1. Use appropriately and safely laboratory equipment with a view to the presentation of results within the court of law
- C2. Observe and accurately record activity within the laboratory
- C3. Discover and recognise the various types and value of forensic evidence
- C4. Select and apply appropriate statistical techniques with a view to data presentation within a court of law
- C5. Prepare scientific reports and presentations

### Learning and Teaching Methods and Strategies

Specific subject outcomes are attained through lectures, practicals, workshops, visits to forensic laboratories and Police stations, and tutorials. Additional support in the area of library skills is provided by the Subject Librarian during the first term

# **Assessment**

Subject Specific skills are assessed through tests and laboratory reports, lab-based examinations, unseen examinations and written assignments (C1-C5).

# **Transferable skills -** students will be expected to:

- D1. Be reflective learners by analysing their strengths and weaknesses
- D2. Communicate effectively both in written and oral form
- D3. Work effectively in teams
- D4. Demonstrate problem-solving skills

# **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in the Level 5. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. IT skills are developed through components of some Level 5 units and through individual learning that is supported by University-wide workshops offered by Academic Services.

### **Assessment**

Effective communication of ideas is an important criterion in the assessment of all student work and in some units is additionally assessed through oral presentations (D1). D2 and D3 are assessed, for example, through specialist reports as well as examinations.

# LEVEL 6 OUTCOMES - BSc (Hons) Forensic Science

# Subject knowledge and understanding - students will be expected to have:

- A1. Demonstrated a knowledge of the issues, practicalities and techniques involved in forensic science and crime scene investigations including in the interpretation of results
- A2. A critical understanding of the moral and ethical issues that surround forensic science and the need for professional codes of conduct
- A3. A knowledge of the legal and regulatory framework within forensic and crime scene science
- A4. A knowledge of the specific field and laboratory techniques employed to locate, collect and analyse forensic evidence and modern human skeletal remains
- A5. Demonstrated detailed knowledge and understanding of forensic and crime scene science in a chosen specialised area

# **Learning and Teaching Methods and Strategies**

Knowledge and understanding is acquired through lectures, tutorials, practicals and group work activities and research project meetings. Students will be expected to review published sources to investigate a range of key concepts and case study material. In some cases, they will be involved in collecting their own data or being given realistic data related to forensic and/or crime scene science. Students will be expected to undertake their own research as part of the directed or independent research project.

### **Assessment**

Subject knowledge and understanding is assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (A1-A4). A5 is assessed through a research project.

# Intellectual Skills - students will be expected to:

- B1. Critically evaluate and review information from a range of sources
- B2. Apply appropriate scientific research methodologies
- B3. Define problems, devise and evaluate possible solutions
- B4. Apply critically, knowledge to specific situations

# **Learning and Teaching Methods and Strategies**

Intellectual skills are acquired through the learning and teaching methods and strategies outlined above. Students are encouraged by academic staff to undertake independent reading and the University support Services offer sessions in the use of, for example, library and study skills.

### **Assessment**

The intellectual skills are assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (B1-B4). B4 is additionally assessed through a research project.

Subject specific skills - students will be expected to:

- C1. Engage in a directed or independent project with limited reliance on guidance
- C2. Relate research findings to existing literature and the forensic context
- C3. Be aware of the ethical and health and safety issues related to work within the forensic arena

Subject specific outcomes are attained through lectures, group exercises that may include practicals and workshops, and the research project. The project supervisor provides specific support for the student and where appropriate, technical support is also provided.

#### Assessment

Specific subject skills are assessed through professional reports, oral presentations, laboratory assessments, role-play, written assignments and unseen-examinations (C1-C3). C2 is additionally assessed through a research project.

**Transferable skills -** students will be expected to:

- D1. Undertake self-management and personal organisation (e.g. time management)
- D2. Work under pressure to meet deadlines
- D3. Communicate effectively both orally and in writing
- D4. Demonstrate problem-solving skills and the application of knowledge
- D5. Recognise and respect the views of others
- D6. Work both independently, and with others

### **Learning and Teaching Methods and Strategies**

Transferable skills are developed through the learning and teaching methods and strategies outlined above. Students are encouraged to undertake independent reading and to relate the concepts introduced in Level I. Regular feedback on assignments and in tutorial, laboratory and practical situations allows students to develop not only their understanding, but also their ability to communicate their ideas. project meetings also provide the forum for debate, development and the exchange of ideas.

### **Assessment**

The research project assesses, either directly or indirectly, all of the transferable skills (D1-D6). Some elements may not be formally assessed but are demonstrated by the student's ability to meet deadlines.

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# Post Graduate Programmes

# **MSc Archaeology**

# **PROGRAMME DIAGRAM MSc Archaeology** Stage 2/Level 7 **Option units** Exit qualification: MSc **Core units (Compulsory)** Archaeology Research Project (60) Requires 180 Level 7 credits Stage 1/Level 7 Option units Core units (Compulsory) **Progression requirements** 120 Level 7 credits Choose 2 of the following: Forensic Archaeology (20) Techniques of Archaeological Management of Archaeological Material (20) Maritime Archaeology (20) Principles and Methods in Human Osteology Recovery and Recording (20) **Exit qualification: PG Cert** (20) Principles and Methods in Zooarchaeology Archaeology (20) Marine Environment, Heritage and Spatial Requires 60 Level 7 credits Marine Environment, Heritage and Spa Planning (20), Choose 3 of the following: Advanced Zooarchaeology(20) Archaeology of Human Remains (20) Human Evolution (20) Humans, Animals and Diet (20) Applied Maritime Archaeology (20) Applied Field Investigation (20) Bodies of Evidence: Skeletal Changes Before and After Death (20) Exit qualification: PG Dip Archaeology Requires 120 Level 7 credits Before and After Death (20)

# **MSc Archaeology**

### Introduction

MSc Archaeology is an ongoing programme in an area where the Department has a critical mass of staff expertise and a strong reputation for providing highly skilled undergraduates for the profession. This pathway presents an exciting opportunity for students at postgraduate level, who will have the chance to gain core skills with our skilled practitioners using our state of the art equipment base, whilst choosing from a broad range of options to build a bespoke postgraduate archaeology qualification tailored to their own particular interests.

The School is well placed to offer a versatile Archaeology MSc and the pathway will cater both for archaeology graduates wishing to gain further skills and specialization and also more general science and humanities graduates seeking a conversion course to enter the field of archaeology. It will provide them with:

- A core of theory, knowledge, tools and methods that define the professional archaeological field.
- Training for a career within the field of practical archaeology or a chance to branch out and specialise in a particular area of archaeological study, and a firm foundation for future research.
- A sound understanding of how field survey, excavation and/or post-excavation studies can be integrated into general archaeological research and practice.

The pathway aims to enhance career opportunities for graduates from a variety of fields and for practising archaeologists seeking to expand their expertise. The core unit provides essential practical skills and experience in core pillars of field survey, excavation and recording in the field. The wide range of options allow students to gain additional knowledge/skills (including osteology, environmental materials, evolutionary studies, maritime and forensic archaeology) in more specialised areas that will give them extra marketability in the professional arena. The pathway provides an excellent foundation for those wishing to pursue careers as archaeological practitioners, researchers and academics.

## AIMS OF THE PROGRAMME

The overall aim of this pathway is to provide students with a sound and detailed knowledge and critical understanding of practical skills, methods and critical approaches in archaeology with an individualised approach to the overall composition of the course. Such knowledge and understanding are set within the wider context and perspective of professional practice within archaeology, as well as offering the chance to explore evolutionary, palaeoenvironmental, osteological or maritime themes. These aims cannot be gained solely by theoretical academic studies and therefore practical experience of the methods and techniques used for recording and analysing field and laboratory remains is imperative.

The pathway also offers an optional placement opportunity.

This individualised pathway, aims to provide its graduates with advanced and applied knowledge and understanding of:

- The planning and practicalities involved in undertaking archaeological fieldwork projects in the UK.
- The range of archaeological materials and features common to terrestrial archaeology and the factors involved in their survival
- The range of excavation and survey techniques in common use in professional field archaeology
- The general principles underlying the interpretation of archaeological data
- Professional reporting and presentation skills relating to recovery and recording in field archaeology

• One or more diverse or related areas of specialist archaeological investigations e.g. environmental, maritime, forensic, zooarchaeology, biological anthropology.

### INTENDED LEARNING OUTCOMES

# **Pathway Intended Learning Outcomes**

This pathway provides opportunities for students to develop and demonstrate knowledge, understanding and skills, as follows.

# Subject Knowledge and Understanding – students will be expected to:

- A1. Have a critical understanding of and the ability to evaluate relevant theories, concepts and principles, relevant to field based archaeology
- A2. Have knowledge of the practical skills relevant to professional archaeological practice
- A3. Obtain a wide-range of practical skills, including the ability to judge appropriate use of recording, analytical and statistical methods, commonly used by specialists in post-excavation
- A4. Demonstrate an understanding of project management and an appreciation of how this is applied to different stages of the archaeological process
- A5. Understand the multidisciplinary nature of the pathway and the need to apply knowledge from a range of subject areas

# Intellectual Skills - students will be expected to:

- B1. Analyse and synthesise disparate information, relevant to archaeological data and interpretations and show the ability to communicate and apply this information
- B2. Produce written specialist reports and communicate archaeological findings to both specialist and non-technical audiences
- B3. Critically evaluate the potential and limitations of archaeological data
- B4. Integrate evidence from a range of sources, to support findings and hypotheses
- B5. Display an understanding of the planning of archaeological projects, or projects in related disciplines
- B6. Plan and execute a research strategy designed to answer a question, create new knowledge or provide original insights and communicate the results of the research effectively

# Subject-Specific/Practical Skills – students will be expected to:

- C1. Evaluate, bring together and integrate disparate information and data relevant to field archaeology
- C2. Undertake appropriately informed identification and analyses of archaeological material remains
- C3. Demonstrate knowledge and critical understanding of any of the following: post-excavation studies; past environmental change; forensic archaeology; maritime archaeology; zooarchaeology, biological anthropology

- C4. Show a good understanding of the fundamental principles of excavation processes, including site survey and the recovery and recording of archaeological features and remains
- C5. Develop a critical awareness of analytical techniques that enhance our understanding and interpretation of archaeological data
- C6. Understand the roles of and be able to effectively communicate, with relevant archaeological professionals
- C7. Gain an understanding of appropriate legislation, health and safety and project planning guidance, relevant to the archaeological profession

# Transferable Skills – students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Effectively employ IT facilities, including word-processing, spread sheet, database, presentation packages and the Web
- D3. Prepare conference/journal papers
- D4. Apply appropriate project planning and management approaches
- D5. Analyse and evaluate a range of published and unpublished data
- D6. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D7. Be independent and reflective learners
- D8. Undertake independent work of an original nature

### **Learning and Teaching Methods and Strategies**

A range of strategies are employed to provide a varied learning experience, effectively targeted towards developing the key areas of core subject knowledge and understanding, cognitive and intellectual development, subject-specific practical skills and more general transferable skills and knowledge.

Core knowledge and understanding (A1-5) is acquired through lectures, seminars, practicals, workshops and independent learning. Students are expected to undertake independent reading and to relate the concepts introduced in different units (A1-3, A5). Practical field and post-excavation skills and knowledge (A3-4) are enhanced by independent study of collection of data. Where possible, related field trips also add to core knowledge (A6). Feedback on assignments allows students to refine and develop their understanding.

Intellectual and cognitive skills are developed through lectures and class discussion (B1-6), practical workshops and projects (B1-5), seminar work (B1-6) and individual tutorials (B6). Independent and guided study on the personal research project further enhances intellectual growth in all these areas, especially B6.

Subject specific and practical skills are promoted through technical workshops and field practical sessions (C2-4) and further developed through peer-assisted and independent learning. The execution of a journal paper may also involve elements of experiment and test practical skills. Other subject specific skills are obtained via lectures and seminars (C1-7) and if possible, related field trips (C1 and 6).

Transferable skills (D1-8) are developed through all the learning and teaching methods. Regular feedback on assignments, presentations, workshop and practicals allows students to develop not only their understanding, but also their ability to communicate their ideas (D1, D7).

## **Assessment Strategies**

Knowledge and understanding, intellectual skills, subject-specific/practical skills and transferable skills are summatively assessed entirely through coursework. A range of assessment strategies is employed to enhance the learning experience and to most effectively evaluate the diverse range of learning outcomes.

The core knowledge and understanding (A1-6) is assessed through appropriately structured essays, short-answer practical identification and recording tests, specialist reports, oral presentations and 'conference papers'.

Intellectual skills (B1-6) are assessed through appropriately structured essays, practical skills tests, specialist reports, oral presentations and academic papers. Outcome B6 is assessed through the execution of a research proposal, independent research project and subsequent journal paper, which allows the student to demonstrate his/her, critical thinking skills to the highest level.

Subject-specific/practical skills (C1-7) are assessed through appropriately structured essays, short answer and practical identification 'spotter' tests, specialist reports, oral presentations and academic papers. The journal paper will assess C1 and depending on the chosen topic, a range of other subject-specific and/or practical skills (C2-7).

Effective communication of ideas is an important criterion in the assessment of all student work. D1-8 are assessed variously through essays, written reports and papers, database design, oral presentations and a dissertation. Certain assignments are designed to develop particular transferable skills; for example, oral presentations and write-up of academic papers (D1-3, 5), use of digital data (D2) and the personal research project (D6-8).

# Learning outcomes for PGCert and PGDip

By completing any 60 credits from the taught units on this pathway you will meet the following learning outcomes: A1, A2, B2, B3, C2, C3, C6, D1-D3, D7

By completing units appropriate for the taught component of this course (excluding the research project) and achieving 120 credits you will meet the following learning outcomes: A1-A4, B2-B4, C1-C6, D1-3, D7, D8

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# **MSc Bioarchaeology**

# PROGRAMME DIAGRAM **MSc Bioarchaeology** Stage 2/Level 7 Core units (Compulsory) Exit qualification: MSc Bioarchaeology Research Project (60) Requires 180 Level 7 credits Stage 1/Level 7 **Option units Professional requirements** Core units (Compulsory) Choose 2 of the following: 120 Level 7 credits Management of Archaeological **Human Functional Anatomy** Material (20) Exit qualification: PG cert Principles and Methods of Bioarchaeology Zooarchaeology (20) Techniques of Archaeological Recovery and Recording (20) Principles and Methods in Requires 60 Level 7 credits Human Osteology (20) Exit qualification: PG Dip Marine Environmental, Heritage Archaeology of Human and Spatial Planning (20) Bioarchaeology Requires Remains (20) Choose 1 of the following: 120 Level 7 credits Human Evolution (20) Humans, Animals and Diet

# **MSc Bioarchaeology**

### PATHWAY AIMS AND OUTCOMES

#### Introduction

Bioarchaeology is concerned with investigating and interpreting past societies through the appreciation of their skeletal remains in the context of prevailing socio-cultural, political, and economic circumstances, as well as belief systems. The subject sits firmly at the interface of the science and humanities aspects of anthropology, and it has strong links with a range of academic disciplines, including archaeology, archaeological science, and social anthropology. Its working methods draw on concepts from social, ecological and evolutionary theory. Being the only course with this particular orientation in the UK, a team of internationally known experts offers a programme of study that puts theoretical knowledge into hands-on experiential learning in one of the best-equipped specialist laboratory settings in the country.

Intensive training in human functional anatomy and skeletal examination of all common forms of human remains encountered in archaeological settings prepares for the in-depth study of major aspects of the human life course, from demography to diet, disease, activity, mobility, genetics and mortuary behaviour. The aspects of taphonomy and degradation of human remains as elements of critical appraisal of the source material will also be covered.

The programme provides a dedicated progression of learning from mastery of advanced anatomical and diagnostic skills to the specialist understanding of contextualised human skeletal analysis, complemented by options of archaeozoology, field archaeology, palaeo-environmental studies, and post-excavation experience. It offers an unparalleled opportunity to engage in a broad programme of study that will equip students with the knowledge and skills for further qualification or work in anthropology, archaeology, cultural studies and human sciences.

# AIMS OF THE PROGRAMME

This programme provides opportunities for students to develop and demonstrate knowledge, understanding and skills that will allow them to progress to apply a holistic view to the interpretation of past human populations.

The primary aim of this programme is the development of graduates who:

- Have a critical understanding of the scientific and theoretical basis of bioarchaeology
- Have a broad grounding in the evidence and theories relating to human osteology
- Appreciate the relationships between bioarchaeology and other related disciplines including archaeology, archaeozoology, palaeo-environmental research, and biological anthropology
- Have the necessary scientific, regulatory and theoretical knowledge to develop careers in areas
  of bioarchaeology and related disciplines
- Understand the potential and limitations of using human remains as primary evidence for reconstructing past societies and events
- Have the skills and knowledge necessary for further postgraduate study.

The degree also aims to provide students with a substantial range of transferable skills in data analysis, report writing, designing and executing a research project, and critical analysis of published research.

The pathway will provide in-depth treatment of the following principle elements of bioarchaeology:

• Ethics, relevant legislation, codes and professional practice in handling human remains and samples

- An introduction to analytical procedures relevant to bioarchaeology, including molecular approaches
- Methods of recovery, excavation, packaging and care of human remains and conservation of other materials
- Analysis of human remains including soft and hard tissue anatomy, skeletal anatomy of foetal, neonatal, infant, juvenile and adult remains, human-non human identification, individualisation (i.e. ancestry, sex, age, stature), disease and trauma, taphonomy and decay processes
- Contextualised analysis of human remains

### PATHWAY INTENDED LEARNING OUTCOMES

**Subject Knowledge and Understanding** - This pathway provides opportunities for students to develop and demonstrate knowledge and understanding as follows:

- A1. Have a critical understanding of theories, concepts and principles relevant to bioarchaeology
- A2. Place their knowledge within international standards for bioarchaeology
- A3. Understand the multidisciplinary nature of the subject and the need to apply knowledge from a range of subject areas in assessing problems and formulating solutions
- A4. Recognise the ethical dimensions of their actions and the need for professional codes of conduct
- A5. Have knowledge and understanding of the techniques relevant to the analysis and solution of problems in bioarchaeology
- A6. Analyse critically published work in the field of bioarchaeology and related disciplines.

**Intellectual Skills** - This pathway provides opportunities for students to develop and demonstrate intellectual skills as follows:

- B1. Evaluate critically and apply scientific knowledge and skills in bioarchaeology
- B2. Analyse and synthesise information relevant to bioarchaeology
- B3. Use specialised technical and academic skills in bioarchaeology
- B4. Define problems and devise and evaluate possible solutions to both routine and unfamiliar problems
- B5. Integrate evidence from a range of sources to support findings and hypotheses
- B6. Plan, execute and report on a project involving original research.

# Subject Specific Skills - successful students will be able to:

- C1. Demonstrate a working strategy for collecting and interpreting data in bioarchaeology
- C2. Demonstrate an in-depth and critical understanding of the range of techniques in bioarchaeology

- C3. Present research findings in a range of effective and appropriate formats. Prepare technical reports, presentations databases
- C4. Make effective use of the relevant academic literature and other sources of information.

**Transferable Skills** - This pathway provides opportunities for students to develop and demonstrate transferable skills as follows:

- D1. Communicate effectively by oral, written and visual means to both professional and non-professional audiences
- D2. Make effective use of IT, including the Web and word-processing
- D3. Collect and analyse a range of data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across the boundaries of different disciplines
- D6. Identify and work towards targets for personal, career and academic development
- D7. Be independent and reflective learners

# **LEARNING AND TEACHING METHODS AND STRATEGIES**

# Subject Knowledge and Understanding

Core knowledge and understanding is acquired through lectures, demonstrations, seminars, workshops, formative work, practical sessions and independent learning. Students are guided to key topical issues and the learning experience is enhanced by recent research and professional practice (A1-6, B1-6, C1-4, D1-7). Students are expected to undertake independent reading and data collection and to relate the concepts introduced in different units (A1-6, B1-6, C1-4, D1-7). Feedback on assignments and tests allows students to refine and develop their understanding (D6-7).

# **Intellectual Skills**

Intellectual skills are developed through the learning and teaching methods and strategies outlined above (A1-6, B1-6, C1-4, D1-7).

# **Subject Specific Skills**

Subject-specific skills are developed through the learning and teaching methods and strategies outlined above (C1-4).

# **Transferable Skills**

Regular feedback on assignments and presentations allows students to develop not only their understanding, but also their ability to communicate their ideas. Working collectively during practical sessions contributes towards developing abilities in collaboration, liaison and team work (D1-7).

# **ASSESSMENT STRATEGIES**

# **Subject Knowledge and Understanding**

The core knowledge and understanding is assessed through appropriately structured coursework, professional reports, practical tests, and essays, regularly involving case-study material during the taught units (A1-6).

### **Intellectual Skills**

The intellectual skills are assessed through assignments often involving the analysis of bioarchaeology data (outcomes B1-B5). Outcomes B1-6 are also assessed through the research project.

# **Subject Specific Skills**

Outcomes C1-C4 are assessed through coursework and the research project.

# **Transferable Skills**

D1-D7 are important components of all M-Level assessment and are therefore embedded throughout the framework. Effective communication of ideas is an important criterion in the assessment of all student work. Outcomes D1-6 are assessed through coursework, personal presentations and the research project.

# Learning outcomes for PGCert and PGDip

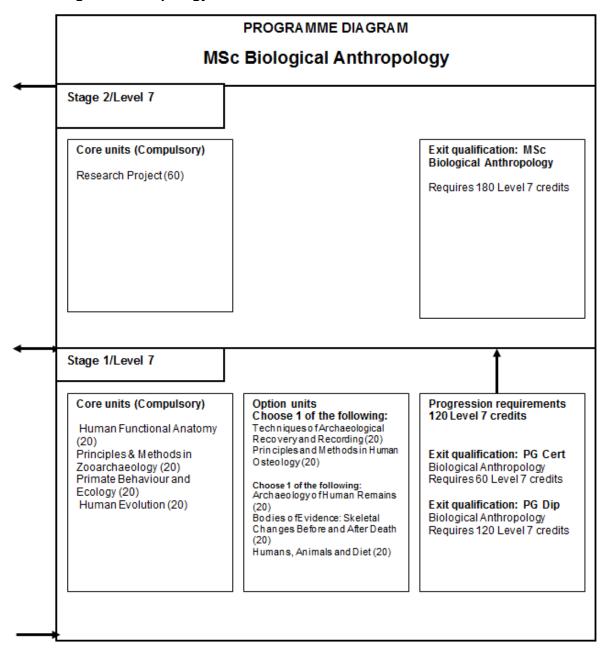
By completing any 60 credits from the taught units on this pathway you will meet the following learning outcomes:

A1, A3, A6, B1, B2, B5, C1, C3, C4, D1, D2, D7

By completing units appropriate for the taught component of this course (excluding the research project) and achieving 120 credits you will meet the following learning outcomes: A1-A6, B1-B3, B5, C1-C4, D1, D2, D5, D7

MSc Bioar	chaeology	Programme Skills Matrix Template																							
Matrix tab	le showir	ng the relationship between ILOs for	a progra	mme and i	ts constitu	ent units																			
												Prog	gramme Int	ended Lea	rning Outo	omes									$\overline{}$
		Units	A 1	A 2	A	A	A	A	B	В	В	В	В	В	C	C	C	C	D 1	D	D	D	D	D	D 7
		Human Functional Anatomy	×	2	×	4	5	В	1	2	x	4	)	6	-	×	x	×	1	2	x	×	-	- "	×
		Principes and Methods in Human Osteology																							
		Principles and Methods in			<u> </u>	<u> </u>		1	<u> </u>	<u> </u>			<u> </u>		<u> </u>										
		Zooarchaeology			×		×	×	×	×			×			×				-				$\vdash$	$\vdash$
	7	Techniques of Archaeological																							
	LEVEL 7	Recovery and Recording Archaeology of Human Remains	×	×	×	×	×	×	×	×	×				×	×	×	×				×	×		
	_	Human Evolution			×			×		×			×												
		Humans Animals and Diet  Marine Environment Heritage and			×			×		×							×								
		Spatial Planning Management of Archaeological			×			×		×		×													
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		Subject Knowledge and Unders	tanding -	This pathy	vay provid	es opporti	unities fo	r students	to develo	p and den	nonstrate I	knowledge	e and unde	erstanding	as follow	s:									
		A1 have a critical und	lerstandir	ng of theor	ries, conce	pts and p	rinciples i	relevant to	bioarcha	eology															
		A2 place their knowle	edge with	in internat	tional star	dards for	bioarcha	eology																	
		A3 understand the m	ultidiscip	linary natu	re of the	subject ar	nd the nee	ed to apply	knowled	ge from a	range of s	ubiect are	as in asses	sing prob	lems and t	ormulatir	g solution	ıs							
														0,			0								
		A4 recognise the eth																							
		A5 have knowledge a	nd under	standing o	of the tech	niques re	levant to	the analys	is and sol	ution of pr	oblems in	bioarchae	ology												
		A6 analyse critically p	oublished	work in th	e field of	bioarchae	ology and	d related di	sciplines																
		Intellectual Skills - This pathway	provides	opportuni	ties for st	udents to	develop a	and demon	strate in	tellectual s	kills as fol	lows:													
		B1 evaluate critically	and appl	y scientific	knowledg	e and ski	lls in bioa	rchaeology																	
		B2 analyse and synth	esise info	ormation re	elevant to	bioarchae	eology																		
		B3 use specialised te	chnical a	nd academ	ic skills in	bioarchae	eology																		
		B4 define problems a	nd devis	e and eval	uate nossi	ble colutiv	ons to hot	th routine :	and unfar	niliar probl	ems														
										illiai piobi	ems														
		B5 integrate evidenc	e from a	range of so	ources to s	upport fir	ndings and	d hypothes	es																
		B6 plan, execute and	report o	n a project	involving	original re	esearch.																		
		Subject Specific Skills – successf	ul studen	ts will be a	ble to:																				
		C1 demonstrate a wo	rking stra	ategy for c	ollecting a	nd interp	eting dat	ta in bioarc	haeology																
		C2 demonstrate an in	n-depth a	nd critical	understan	ding of th	e range o	of technique	es in bioa	rchaeolog	v														
		1									rts, prese	ntations d	atabases												
		C4 make effective us	e of the r	elevant ac	ademic lite	erature ar	nd other s	ources of i	nformatio	on.															
				<b>—</b>																					
		D1 communicate effe	ectively b	y oral, writ	ten and v	sual mea	ns to both	profession	nal and n	on-protess	ional audi	ences													
		D2 make effective us	e of IT, in	cluding the	e Web and	l word-pro	ocessing																		
		D3 collect and analys	e a range	of data																					
		D4 work in collaborar	tion with	others. inc	luding sta	ff and stu	dents																		
		-							41 I	dealer 5	lee · · ·	1-1/													
		D5 demonstrate prob								uaries of d	ırrerent di	sciplines													
		D6 identify and work	towards	targets for	personal,	career ar	nd acaden	nic develop	oment																
		D7 be independent a	nd reflect	tive learne	rs.																				
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# **MSc Biological Anthropology**



# **MSc Biological Anthropology**

### PATHWAY CONTEXT AIMS AND OUTCOMES

### Introduction

Biological Anthropology is the study of evolution and variation in human populations and of the interactions between human biology, culture and environment. The subject has roots in and links with a range of academic disciplines, including archaeology and social anthropology. This programme provides theoretical and practical training and considers methods and theories in biological anthropology from a broad range of perspectives, including human origins and evolution and human bioarchaeology. It draws on the School's international reputation for anthropology, archaeology and biology.

Whilst a number of UK universities offer some teaching in biological anthropology, it is commonly embedded within other degree programmes, usually archaeology. This programme is particularly distinctive in that it offers an opportunity to students to focus their studies specifically on Biological Anthropology. The programme includes comparative anthropology and detailed human osteology (at a level suitable for a forensic anthropologist).

The degree also covers sources of physical variation within human populations and the origins of such variations. Additional consideration is given to the wider settings within which the human species has developed and so the programme includes elements of archaeological science and palaeoenvironmental study. Consequently, the degree is extremely wide ranging, covering periods stretching from the beginnings of human development, up to the present day. As such, the course offers an unparalleled opportunity to engage in a study programme that will leave students well equipped to continue a career in the study of human evolution, modern human variation, or the analysis of archaeological (or forensic) human skeletal remains.

# AIMS OF THE PROGRAMME

This programme provides opportunities for students to develop and demonstrate knowledge, understanding and skills that will allow them to progress to employment or further study in areas related to human evolution, human bio-archaeology and forensic anthropology.

The primary aim of this programme is the development of graduates who:

- Have a critical understanding of the scientific and theoretical basis of biological anthropology
- Have a broad grounding in the evidence and theories relating to human origins and evolution
- Appreciate the relationships between biological anthropology and other related disciplines including archaeology, palaeo-environmental research and forensic science
- Have the necessary scientific, regulatory and theoretical knowledge to develop careers in areas
  of biological anthropology and related disciplines
- Understand the prospects and limitations of using human remains as primary evidence for reconstructing past societies and events
- Have the skills and knowledge necessary for further postgraduate study.

The degree also aims to provide students with a substantial range of transferable skills in data analysis, report writing, designing and executing a research project and proposal and critical analysis of published research.

The pathway will provide in-depth treatment of the following principle elements of biological anthropology:

• Ethics, relevant legislation, codes and professional practice in handling human remains and samples

- An introduction to analytical procedures relevant to biological anthropology
- Methods of recovery, excavation, packaging and care of human remains and conservation of other materials
- Analysis of human remains including taphonomy and decay processes, soft and hard tissue anatomy, skeletal anatomy of foetal, neonatal, infant, juvenile and adult remains, human-non human identification, individualisation (i.e. ancestry, sex, age, stature), disease and trauma
- Human evolution and primate behavioural ecology
- Molecular approaches in biological anthropology

### PROGRAMME INTENDED LEARNING OUTCOMES

**Subject Knowledge and Understanding** - This pathway provides opportunities for students to develop and demonstrate knowledge and understanding as follows:

- A1. Have a critical understanding of theories, concepts and principles relevant to biological anthropology
- A2. Place their knowledge within international standards for biological anthropology
- A3. Understand the multidisciplinary nature of the subject and the need to apply knowledge from a range of subject areas in assessing problems and formulating solutions
- A4. Recognise the ethical dimensions of their actions and the need for professional codes of conduct
- A5. Have knowledge and understanding of the techniques relevant to the analysis and solution of problems in biological anthropology
- A6. Analyse critically published work in the field of biological anthropology

**Intellectual Skills** - This pathway provides opportunities for students to develop and demonstrate intellectual skills as follows:

- B1. Evaluate critically and apply scientific knowledge and skills in biological anthropology
- B2. Analyse and synthesise information relevant to biological anthropology
- B3. Use specialised technical and academic skills in biological anthropology
- B4. Define problems and devise and evaluate possible solutions to both routine and unfamiliar problems
- B5. Integrate evidence from a range of sources to support findings and hypotheses
- B6. Plan, execute and report on a project involving original research

# **Subject Specific Skills** – successful students will be able to:

- C1. Demonstrate a working strategy for collecting and interpreting data in biological anthropology
- C2. Demonstrate an in-depth and critical understanding of the range of techniques in biological anthropology

- C3. Present research findings in a range of effective and appropriate formats. Prepare technical reports, presentations databases
- C4. Make effective use of the relevant academic literature and other sources of information

**Transferable Skills** - This pathway provides opportunities for students to develop and demonstrate transferable skills as follows:

- D1. Communicate effectively by oral, written and visual means to both professional and non-professional audiences
- D2. Make effective use of IT, including the Web and word-processing
- D3. Collect and analyse a range of data
- D4. Work in collaboration with others, including staff and students
- D5. Demonstrate problem-solving skills and the application of knowledge across the boundaries of different disciplines
- D6. Identify and work towards targets for personal, career and academic development
- D7. Be independent and reflective learners

### LEARNING AND TEACHING METHODS AND STRATEGIES

# **Subject Knowledge and Understanding**

Core knowledge and understanding is acquired through lectures, demonstrations, seminars, workshops, formative tests, practical sessions and independent learning. Students are guided to key topical issues and the learning experience is enhanced by recent research and professional practice (A1-6, B1-6, C1-4, D1-7). Students are expected to undertake independent reading and data collection and to relate the concepts introduced in different units (A1-6, B1-6, C1-4, D1-7). Feedback on assignments and tests allows students to refine and develop their understanding (D6-7).

# **Intellectual Skills**

Intellectual skills are developed through the learning and teaching methods and strategies outlined above (A1-6, B1-6, C1-4, D1-7).

### **Subject Specific Skills**

Subject-specific skills are developed through the learning and teaching methods and strategies outlined above (C1-4).

# **Transferable Skills**

Regular feedback on assignments and presentations allows students to develop not only their understanding, but also their ability to communicate their ideas. Working collectively during practical sessions contributes towards developing abilities in collaboration, liaison and team work (D1-7).

## **ASSESSMENT STRATEGIES**

# **Subject Knowledge and Understanding**

The core knowledge and understanding is assessed through appropriately structured coursework reports, spotter tests and essays regularly involving case-study material during the taught units (A1-6).

### **Intellectual Skills**

The intellectual skills are assessed through assignments often involving the analysis of biological anthropological data (outcomes B1-B5). Outcomes B1-6 are also assessed through the research project.

# **Subject Specific Skills**

Outcomes C1-C4 are assessed through coursework and the research project.

### **Transferable Skills**

D1-D7 are important components of all M-Level assessment and are therefore embedded throughout the framework. Effective communication of ideas is an important criterion in the assessment of all student work. Outcomes D1-6 are assessed through coursework, personal presentations and the research project.

# Learning outcomes for PGCert and PGDip

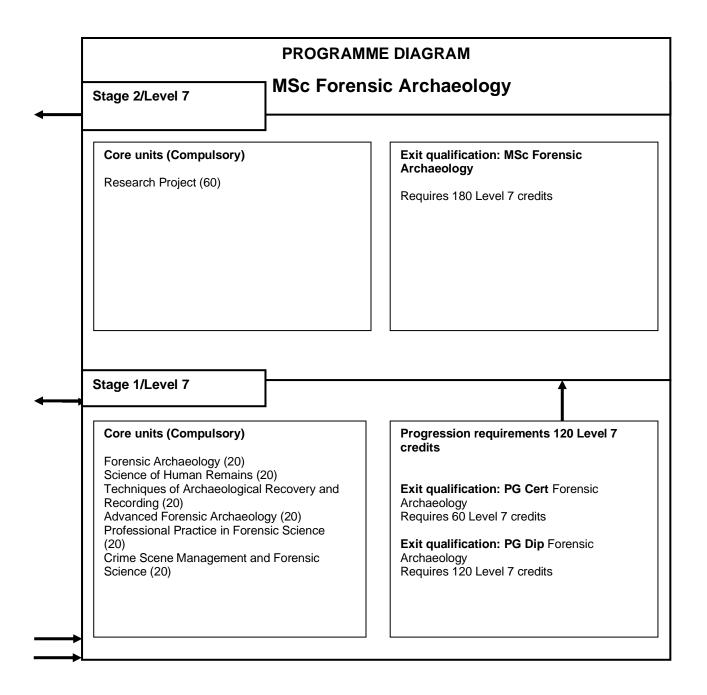
By completing any 60 credits from the taught units on this pathway you will meet the following learning outcomes:

A1, A3, A6, B1, B2, B5, C1, C3, C4, D1, D2, D7

By completing units appropriate for the taught component of this course (excluding the research project) and achieving 120 credits you will meet the following learning outcomes: A1-A6, B1-B3, B5, C1-C4, D1, D2, D5, D7

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		Programm	ne Intended	d Learning	Outcome	s					1										1			
	Units	A .	A .	A .	A .	A	A	B	В	В	B	В	В	C	C	C	C	D 1	D	D	D A	c	c	7
	Human Functional Anatomy	x	2	5	*	x	x	1	x	x	4	x	0	1	2	3	*	x	x	3	×	3	0	×
	,					Ī				1		-						ľ						
	Primate Behaviour and Ecolog	×		x			х					x					x	х	х	х		х		
	Principles and Methods in Human Osteology																							
	Principles and Methods in	×		x	×	×	X	X		×		×		X	x		×	×	×	×	x	×		
-	Zooarchaeology	×		×	×		x	x		×		×		x	x		×	×	×	×		×		
LEVELM	Techniques of Archaeological																							
函	Recovery and Recording	х	х	x	х	х	х	х		х		x		х			х	х	х	х		х		
	Archaeology of Human Remains			v	v		v	v			v	v					v	v	v	v		v		
	Bodies of Evidence: Skeletal			^				_			^						^			^				
	changes before and after	x	x	x	x		x			x		x		x		x	x	x	x	x		x		
	Human Evolution	x		x			x			1		x					x	x	x	x		x		
	Humans Animal and Diet PRP	×		×			×		v	1	v	×	v			v	×	×	×	×		×	v	v
									^				^			^	^	^	^	,		^	^	^
	Subject Knowledge and Und	rstanding-	This pathwa	ay provide	es opportu	ni ties for st	udents to	develop and	d demonst	rate knowl	edge and u	nderstandi	ng as follov	vs:										
	A1 have a critica	understand	ling of theo	ries. conc	epts and p	rinciples re	levant to b	iological an	thropolog	v														
	-								,	,														
	A2 place their kr	owledge wi	thin interna	ational sta	ndards for	biological a	anthropolo	gy																
	A3 understand t	e multidisc	iplinary nat	ure of the	subject an	d the need	to apply k	nowledge f	rom a rang	e of subje	t areas in a	ssessing pr	oblems an	d formulat	ing solution	ıs								
	A4 recognise the	ethical dim	ensions of t	heiractio	ns and the	need for p	rofessiona	l codes of co	onduct															
	A5 have knowle	lge and und	erstanding	of the tec	nniques rel	levant to th	e analysis	and solutio	n of proble	ms in biol	ogical anthr	opology												
	1																							
	A6 analyse critic	illy publishe	d work in ti	he field of	biological	anthropolo	ogy.																	
	Intellectual Skills - This pathy	ay provides	opportuni	ties for stu	idents to d	evelop and																		
	demonstrate intellectual skil	as follows:																						
	B1 evaluate crit	cally and app	oly scientifi	cknowled	lge and skil	lls in biolog	ical anthro	pology																
	B3 use specialis	dtechnical	and acaden	nic skills ir	biological	anthropol	ogy																	
	B4 define probl	ms and dev	ise and eval	luate poss	iblesolutio	ons to both	routine an	d unfamilia	ır problem	5														
									. р															
	B5 integrate evi	dence from a	a range of so	ources to	support fin	ndings and h	hypothese:	S																
	B6 plan, execut	and report	on a projec	tinvolvin	g original re	esearch.																		
																		1						
	Subject Specific Skills – succe	ssful studen	its will be al	ble to:																				
	C1 demonstrate	a working st	rategy for o	collecting	and interp	reting data	in biologic	al anthropo	ology															
	C2 demonstrate																							
	C2 demonstrate	an in-depth	and critica	understa	naing of th	ie range or i	tecnnique	s in biologic	ai anthrop	ology														
	C3 present rese	rch findings	in a range o	of effectiv	e and appr	ropriate for	rmats. Prep	oare technic	al reports,	presentat	ions databa	ises												
	C4 make effecti	euse of the	relevant a	cademicli	terature an	nd otherso	urces of inf	formation																
	C4 make enecti	e use of the	reievanta	cademicn	terature ar	iu other sor	urces or iiii	Offination.																
	Transferable Skills - This path and demonstrate transferable	vay provide	s opportun	ities for st	udents to c	develop																		
	and demonstrate transferable	SKIIIS AS TOII	ows:															-						
	D1 communicate	effectively b	oy oral, writ	tten and v	isual mean	s to both p	rofessiona	land non-p	rofessiona	l audience:	5													
	D2 make effective	ause of IT is	actuding+b	e Web ss	tword-pro	ressing																		
				e vvebano	. wora-pro	ressul																		
	D3 collect and an	alyse a rang	e of data																					
	D4 work in collab	oration with	others, inc	cluding sta	ff and stud	lents																		
		roblom col	ving skills a	nd the api	olication of	fknowledge	e across the	e boundarie	es of differ	ent di scipli	nes													
	D5 demonstrate	orobieni-soi																						
								ient																
		ork towards	targets for	personal				ient																

# **MSc Forensic Archaeology**



# **MSc Forensic Archaeology**

### PATHWAY CONTEXT, AIMS AND OUTCOMES

### Introduction

Forensic Archaeology encompasses the application of archaeological principles and methods, within the constraints and framework of the criminal justice system. It was developed in the UK in the 1990s and the MSc Forensic Archaeology was established at Bournemouth University in 1996. Since this time, forensic archaeologists have found an additional role in the international investigation of mass graves for criminal tribunals and humanitarian agencies, crime scene recovery, and recording at mass disasters.

The basis of this pathway is derived from the experience of archaeologists who practice forensic archaeology, both nationally and internationally and addresses the needs identified by the Police authorities, the Scene of Crime Service, UN and identification agencies and the criminal justice system. The teaching is research led and the staff on this pathway are at the forefront of forensic archaeological practice, theory and development, which feeds directly into the teaching and learning.

### AIMS OF THE PROGRAMME

The MSc Forensic Archaeology is committed to the education and training of skilled and adaptable individuals, who will be able to enhance scene of crime investigations in both the domestic and international setting, by applying appropriate archaeological principles and methods. This will be achieved by providing them with:

- A multidisciplinary framework for enhancing the effectiveness of crime scene investigations
- Practical, theoretical and vocational skills to increase their effectiveness within the interface of archaeology, police, crime scene and international investigations
- A detailed knowledge base to integrate practical, ethical, legal and specialist themes
- Advanced knowledge to effectively apply archaeological methods at a domestic and international crime scene
- Contact with practitioners in the field of forensic archaeology and related forensic sciences.

The pathway will provide treatment of the following principal elements of forensic archaeology:

- The development and role of forensic archaeology in the UK, USA, in international and disaster investigations
- The criminal justice system in England and Wales and international human rights law, including the organisation and structure of the police forces within England and Wales
- An introduction to UN agencies and the investigation of mass murder, crimes against humanity and genocide
- An introduction to scene of crime investigation, including organisation and hierarchy, management, procedures and basic legal constraints and the role of the archaeologist at the crime scene
- Ethics, legislation, codes of practice and professional practice in forensic archaeology
- An introduction to the relevant forensic sciences, basic principles and methods as they affect scene of crime activities

- Methods in forensic archaeology, with particular attention to search, location, surface evidence recovery, excavation strategies and techniques, recording methods and interpretation of scenes, including single clandestine graves, mass graves, major incidents and mass disasters
- Procedures including site assessment and evaluation, geophysical techniques and report writing
- An introduction to recovery and identification of human remains, including taphonomic processes, muscular and skeletal anatomy and assessment of basic biological information, distinction of animal and human remains
- Recovery, care and conservation of other materials, including the potential of artefact analysis
  for scene of crime investigation, forensic science and the implications of the legal framework in
  respect of the conservation of materials
- Courtroom and expert witness skills, focusing on practical case work, reporting skills and courtroom procedures.

#### PROGRAMME INTENDED LEARNING OUTCOMES

This M level pathway provides opportunities for students to develop and demonstrate knowledge and understanding, and skills as follows:

## Subject Knowledge and Understanding - Students will be expected to:

- A1. Have a critical understanding of theories, concepts and principles relevant to forensic archaeology and the law
- A2. Evaluate the role of forensic archaeology within the legal system of England and Wales and international humanitarian law
- A3. Recognise the moral and ethical dimensions of their actions, relevant legislation and the need for professional codes of conduct
- A4. Have a comprehensive understanding of the multidisciplinary nature of the field and the need to apply knowledge from a range of subject areas within forensic science
- A5. Understand their role in national or international crime scenes and within a court of law
- A6. Have advanced knowledge and understanding of the role of the coroner, forensic anthropologists, forensic specialists, the police, key international organisations and crime scene personnel.

#### Intellectual Skills - Students will be expected to:

- B1. Analyse and synthesise disparate information relevant to forensic archaeology and show the ability to communicate and apply this information at a crime scene
- B2. Display the ability to work constructively and co-operatively within a multidisciplinary team
- B3. Apply and adapt archaeological principles and methods to specific criminal investigations to solve routine and unfamiliar problems
- B4. Synthesise and evaluate evidence from a range of sources to support findings and hypotheses

- B5. Produce a written specialist report and communicate scientific findings to a non-specialist audience in a court of law
- B6. Display a comprehensive understanding of the planning of projects and their resource implications and management tools necessary for a successful outcome.

# Subject Specific Skills - Successful students will be able to:

- C1. Integrate disparate information relevant to forensic archaeology
- C2. Show a critical understanding of the national and international legal and ethical frameworks in which they will practice
- C3. Recognise the different constraints of relevant frameworks and reconcile these
- C4. Show a critical understanding of the roles of and effectively communicate with, relevant forensic professionals
- C5. Have an effective role at a crime scene and within a courtroom
- C6. Demonstrate self-direction and originality when adapting archaeological principles and methods to specific criminal investigations
- C7. Evaluate, analyse and present information to a specialist and/or non-technical audience

#### **Transferable Skills**

- D1. Communicate effectively by oral, written and visual means
- D2. Use effectively IT, including the Web, and word-processing
- D3. Solve statistical problems using appropriate techniques
- D4. Analyse a range of experimental, published and fieldwork data
- D5. Work in collaboration with others, including key practitioners, staff and students and be able to facilitate and manage group processes, negotiation and participation
- D6. Undertake independent work of an original nature
- D7. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D8. Be independent and reflective learners
- D9. Identify and work towards targets for personal career and academic development

## **LEARNING AND TEACHING METHODS AND STRATEGIES**

A range of strategies are employed to provide a varied learning experience effectively targeted towards developing the key areas of core subject knowledge and understanding, cognitive and intellectual development, subject-specific practical skills and more general transferable skills and knowledge

Core knowledge and understanding (A1-6) is acquired through lectures, seminars, practicals, workshops, relevant fieldwork and independent learning. Students are expected to undertake independent reading and to relate the concepts introduced in different units. Feedback on assignments allows students to refine and develop their understanding.

Cognitive skills (B1-6) are developed via lectures, seminars, practicals, workshops, fieldwork and independent learning. Practical fieldwork exercises particularly develop teamwork and problem solving skills (B2-3). Students are expected to undertake independent reading and to relate the concepts introduced in different units.

Practical skills are promoted through the crime scene workshop and expert witness role-play (C4-5, C7), archaeological methods training, fieldwork, practicals and anthropological laboratory based sessions (C1-7). The execution of a journal paper may also involve elements of experiment and test practical skills.

Transferable skills (D1-9) are developed through learning and teaching methods. Regular feedback on assignments, fieldwork and in workshop situations allows students to develop not only their understanding (D8), but also their ability to communicate their ideas.

#### **ASSESSMENT STRATEGIES**

Knowledge and understanding, intellectual skills, subject-specific/practical skills and transferable skills are summatively assessed entirely through coursework. Assessment strategies are designed to enhance the learning experience and to most effectively evaluate the diverse range of learning outcomes. Feedback is provided during and after assessment participation so that students can improve and progress within and between units.

The core knowledge and understanding (A1-6) is assessed through structured essays, seminars, individual reports, oral presentations, fieldwork performance and forensic case and role-play exercises.

Intellectual skills are assessed through structured essays (B4), individual reports (B3-5), and oral presentations and role-play (B1-5). Outcome B6 is assessed through the execution of a research proposal and journal paper, which allows students to demonstrate their thinking skills to the highest level.

Assessment of subject specific skills (C1-7) is carried out through individual and group performance in forensic case and role-play exercises in lab and field (C4-5, C7), written assignments, individual field reports, presentations and the journal paper(C1-7).

Effective communication of ideas is an important criterion in the assessment of all student work. D1-9 are assessed through written reports, essays, role-play, and a journal paper.

## Learning outcomes for PGCert and PGDip

By completing any 60 credits from the taught units on this pathway you will meet the following learning outcomes:

A3, A4, B1, B5, C1, C2, D1, D2, D8

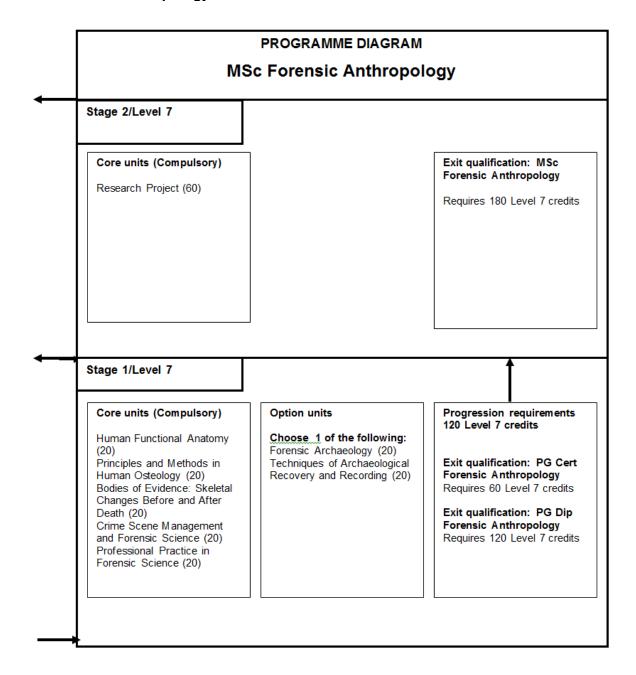
By completing units appropriate for the taught component of this course (excluding the research project) and achieving 120 credits you will meet the following learning outcomes: A1-A5, B1-B3, B5, C1-C5, D1, D2, D7, D8

# MSc Forensic Archaeology Programme Skills Matrix Template Matrix table showing the relationship between ILOs for a programme and its constituent units

										Pro	gran	nme	Inte	ende	d Le	arni	ng C	Outc	ome	s							
	Units	Α	Α	Α	Α	Α	Α	В	В	В	В	В	В	С	С	С	С	С	С	С	D	D	D	D	D	D	D
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Research Project	Χ			Х						Χ		Х	Χ	Χ					Χ	Χ	Χ		Х		Χ	Χ
	Forensic Archaeology	Х		Х						Х	Х			Χ		Χ	Х		Χ	Х							
_ 7	Science of Human Remains	Х			Х						Х			Χ	Χ				Χ		Χ	Х		Х	Χ		Χ
VEL	Techniques of Archaeological Recovery and Recording	Х						Х	Χ	Х							Χ		Х						Χ		Х
Ш	Advanced Forensic Archaeology	Х														Χ				Χ							
	Professional Practice in Forensic Science	Χ	Х	Χ	Х	Χ	Χ	Χ		Х	Χ					Χ		Х							Х		X
	Crime Scene Management and Forensic Science		Х		Х	Х	Χ	Χ	Χ	Х	Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Х		Χ		

Subject Kno	weledge and Understanding - Students will be expected to:			
A1	have a critical understanding of theories, concepts and principles relevant to forensic archaeology and the law			
A2	evaluate the role of forensic archaeology within the legal system of England and Wales and international humanitarian law			
A3	recognise the moral and ethical dimensions of their actions, relevant legislation and the need for professional codes of conduct			
- 73	recognize the mount and current dimensions of their decision, release regarding the recognization of the procession and control of the recognization of the			
A4	have a comprehensive understanding of the multidisciplinary nature of the field and the need to apply knowledge from a range of subject areas within forensic science			
A5	understand their role in national or international crime scenes and within a court of law			
A6	have advanced knowledge and understanding of the role of the coroner, forensic anthropologists, forensic specialists, the police, key international organisations and crime scene personnel.			
Intellectual	Skills - Students will be expected to:			
intellectual	·			
B1	analyse and synthesise disparate information relevant to forensic archaeology and show the ability to communicate and apply this information at a crime scene			
B2	display the ability to work constructively and co-operatively within a multidisciplinary team			
В3	apply and adapt archaeological principles and methods to specific criminal investigations to solve routine and unfamiliar problems			
В4	synthesise and evaluate evidence from a range of sources to support findings and hypotheses			
B5	produce a written specialist report and communicate scientific findings to a non-specialist audience in a court of law			
_				
В6	display a comprehensive understanding of the planning of projects and their resource implications and management tools necessary for a successful outcome.			
_				
Subject Spe	cific Skills - Successful students will be able to:			
C1	integrate disparate information relevant to forensic archaeology			
C2				
(2	show a critical understanding of the national and international legal and ethical frameworks in which they will practice			
СЗ	recognise the different constraints of relevant frameworks and reconcile these			
C4	show a critical understanding of the roles of and effectively communicate with, relevant forensic professionals			
C5	have an effective role at a crime scene and within a courtroom			
C6	demonstrate self-direction and originality when adapting archaeological principles and methods to specific criminal investigations			
C7	evaluate, analyse and present information to a specialist and/or non-technical audience.			
C)	evaluate, analyse and present information to a specialist and/or indirectinitial addience.			
Transferabl	e Skilis			
D1	communicate effectively by oral, written and visual means			
D1	communicate enecuvery by Gran, written and visual means			
D2	use effectively IT, including the Web, and word-processing			
D3	solve statistical problems using appropriate techniques			
D4	analyse a range of experimental, published and fieldwork data			
D5	work in collaboration with others, including key practitioners, staff and students and be able to facilitate and manage group processes, negotiation and participation			
D6	undertake independent work of an original nature			
D7	demonstrate problem solving skills and the application of knowledge across discipline areas			
D8	be independent and reflective learners			
D9	identify and work towards targets for personal career and academic development.			
	The state of the s			

# **MSc Forensic Anthropology**



#### MSC FORENSIC ANTHROPOLOGY

#### PATHWAY CONTEXT, AIMS AND OUTCOMES

#### Introduction

Forensic Anthropology is a division of biological anthropology that is concerned with the analysis of human skeletal remains from forensic contexts. The application of biological anthropology to the forensic arena is increasingly recognised, as providing an important suite of expertise and skills. During recent years international investigations of disasters, human rights violations and genocide have brought a growing demand for skilled practitioners, who can contribute towards the identification of unknown victims and the determination of the cause of their deaths. Such skills have also been increasingly utilised to identify and investigate human remains recovered from forensic contexts relating to domestic criminal activity, particularly in North America, but with a steady growth in recognition globally.

The pathway was developed in response to the fact that, prior to 2000, there was no adequate course of this type delivered within the UK and few elsewhere. Forensic osteology is much more than the simple transference of biological anthropology to the forensic arena. It demands an understanding of legal issues and constraints, management and process of the investigative system and the professional skills enabling evidence to be presented to the Courts. It also requires an understanding of the post mortem fate of human remains, the location and recovery of skeletonised remains and the adaptation and application of biological anthropology to the context of individuals, rather than sample populations.

As the methods and theories applied in forensic anthropology are situated within the wider field of biological anthropology (the study of human beings within the framework of evolution, explicitly emphasising the interaction between biology and culture, and including the study of skeletal remains from archaeological contexts), it seems logical to ensure that students have the skills to examine material from both forensic and archaeological contexts. This serves to further increase the employment prospects and versatility of prospective graduates, whilst study based upon archaeological populations also has relevance in the context of the developing world, where many diseases of the past and pre-industrial conditions are still extant within living communities.

Overall, the proposed course will furnish students with a range of highly specialised skills. In addition, students will gain a wide range of transferable skills including report writing, expert witness training and experience of writing research funding proposals. Teaching is research led throughout the course. Staff on this pathway are at the forefront of forensic practice, theory and development related to human skeletal remains and their knowledge and experience feed directly into the teaching and learning for this pathway.

#### AIMS OF THE PROGRAMME

The MSc Forensic anthropology pathway is committed to the education and training of a cadre of skilled and adaptable individuals, who will be able to examine material from both forensic and archaeological contexts. This will be achieved by providing the following:

- A multidisciplinary framework for building on prior learning regarding the analysis and interpretation of human remains recovered from archaeological and forensic contexts
- Practical, theoretical and vocational skills relating to the application of archaeological and osteological expertise in the context of criminal and international investigations
- A sound understanding of the scientific, technical, ethical, legal and regulatory basis of the
  practice of human osteology in forensic contexts and its application to specific problems and
  situations at all scales from local to global
- The necessary scientific, methodological and legal knowledge base to develop successful careers in specialist fields and integrate specialist themes

- The ability and confidence to communicate effectively both with others working in the field of forensic anthropology, the judiciary and with the wider public
- Contact with practitioners in the field of biological and forensic anthropology and related forensic sciences.

The pathway will provide in-depth treatment of the following principal elements of forensic and biological anthropology:

- The development and role of forensic anthropology / osteology in the UK, USA and in disaster and International investigations
- The criminal justice system in England and Wales and human rights law, including the organisation and structure of the police forces within England and Wales
- An introduction to UN agencies and the investigation of mass murder, crimes against humanity and genocide
- An introduction to scene of crime investigation, including organisation and hierarchy, basic legal constraints and the role of the archaeologist and anthropologist at the crime scene
- Ethics, relevant legislation, codes and practice and professional practice in forensic anthropology
- An introduction to the relevant forensic sciences, basic principles and methods as they affect scene of crime activities
- An introduction to analytical procedures relevant to forensic and biological anthropology
- Methods of recovery, excavation, packaging and care of human remains and conservation of other materials
- Analysis of human remains, including taphonomy and decay processes, soft and hard tissue anatomy, skeletal anatomy of adult and sub-adult remains, differentiation of human from nonhuman bone, biological profiling and individualisation, skeletal pathology and trauma and approaches to the study of population data
- Courtroom and expert witness skills. Focusing on practical expert witness case work and reporting skills, courtroom procedures and skills essential to the effective expert witness both in and out of the witness box.

#### PATHWAY INTENDED LEARNING OUTCOMES

This Masters level pathway provides opportunities for students to develop and demonstrate knowledge and understanding and skills as follows:

## A. Subject Knowledge and Understanding - students will be expected to:

- A1. Have a critical understanding of relevant theories, concepts and principles relevant to forensic and biological anthropology
- A2. Recognise the moral and ethical dimensions of their actions, relevant legislation and the need for professional codes of conduct
- A3. Apply their knowledge of forensic osteology within the legal system of England and Wales and International Humanitarian law
- A4. Understand their role in a national and international crime scene and within a court of law

- A5. Have in-depth knowledge and understanding of the role of the coroner, forensic pathologist, scene of crime officers, the police, key international organisations and personnel and crime scene management
- A6. Critically evaluate and apply scientific knowledge and skills in the development and implementation of practical solutions to forensic problems in specific settings and at various scales

# B. Intellectual Skills - students will be expected to:

- B1. Identify complete and fragmentary human skeletal material
- B2. Display the ability to effectively and efficiently analyse human remains recovered from archaeological and forensic contexts
- B3. Integrate and evaluate evidence from a range of sources to support findings and hypotheses
- B4. Analyse and synthesise disparate information relevant to forensic anthropology and show the ability to communicate and apply this information at a crime scene
- B5. Display the ability to work constructively and co-operatively, within a multidisciplinary team
- B6. Produce written specialist reports and in the case of forensic osteological examination, communicate scientific findings to a non-specialist audience in a court of law
- B7. Display an in-depth understanding of the planning of projects and their resource implications and management tools necessary for a successful outcome

# **C. Subject Specific Skills** – successful students will be able to:

- C1. Comprehensively understand the anatomical structure and physiological function of the skeletal system and its interactions with other body systems
- C2. Demonstrate an in-depth and critical understanding of the range of techniques for identifying and assessing human skeletal remains
- C3. Bring together and integrate disparate information relevant to forensic and biological anthropology
- C4. Understand national and international legal and ethical frameworks in which they will practice
- C5. Recognise the different constraints of relevant frameworks and reconcile these
- C6. Understand the roles of and effectively communicate with, relevant archaeological and forensic professionals
- C7. Have an effective role at an archaeological excavation, or a crime scene and within a courtroom
- C8. Analyse, synthesise and present information to a specialists and/or non-technical audience

# D. Transferable Skills – students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Effectively employ IT facilities, including word-processing, PowerPoint and the Web
- D3. Solve statistical problems using appropriate techniques
- D4. Analyse and synthesise a range of experimental, published and fieldwork data
- D5. Work in collaboration with others, including key practitioners, staff and students, and be able to facilitate and manage group processes, negotiation and participation
- D6. Undertake independent work of an original nature addressed to forensic and biological anthropology
- D7. Demonstrate problem solving skills and the application of knowledge across discipline areas
- D8. Be independent and reflective learners
- D9. Identify and work towards targets for personal career and academic development

#### **LEARNING AND TEACHING METHODS AND STRATEGIES**

A range of strategies are employed to provide a varied learning experience effectively targeted towards developing the key areas of core subject knowledge and understanding, cognitive and intellectual development, subject-specific practical skills and more general transferable skills and knowledge.

Core knowledge and understanding (A1-6) is acquired through lectures, practical workshops, roleplay exercises, class discussions, independent learning and if possible, related field trips. Students are expected to attend post-mortems and trials at the local Crown Court. Furthermore, they are required to undertake independent reading and to relate the concepts introduced in different units. Feedback on assignments allows students to refine and develop their understanding.

Cognitive skills are developed via lectures (B1-7), practical workshops (B1-2), oral presentations and role-play exercises (B3-6), class discussion and independent learning (B1-7). Students are expected to undertake independent reading and to relate the concepts introduced in different units.

Practical skills are promoted through laboratory based practical sessions and anthropological methods training (C1-3, C6), and the mock crime scene workshop (C3-8). The execution of a journal paper may also involve elements of experiment and test practical skills (C1-8).

Transferable skills (D1-9) are developed through learning and teaching methods. Regular feedback on assignments, practical laboratory based workshops and oral presentations, allow students to develop not only their understanding (D8), but also their ability to communicate their ideas.

#### **ASSESSMENT STRATEGIES**

Knowledge and understanding, intellectual skills, subject-specific/practical skills and transferable skills are summative assessed entirely through coursework. A range of assessment strategies is employed to enhance the learning experience and to most effectively evaluate the diverse range of learning outcomes. Feedback is provided during and after assessment participation, so that students can improve and progress within and between units.

The core knowledge and understanding (A1-6) is assessed through appropriately structured essays, short answer tests, multiple choice tests, practical spotter tests, individual reports, oral presentations and forensic case and role-play exercises in lab and field.

Intellectual skills are assessed through appropriately structured essays (B2 - B5), short answer tests, multiple choice tests (B1 - B3), practical spotter tests (B1 - B3), individual reports (B2, B3, B6), oral

presentations and role-play (B5 - B6). Outcome B7 is also assessed through the execution of a research proposal and journal paper, which allows the student to demonstrate his/her, thinking skills to the highest level.

Anatomical structure and physiological function (C1) is assessed by short answer and multiple choice tests. Techniques employed for human skeletal analysis (C2) is assessed by short answer, multiple choice and spotter tests. Assessment of subject specific skills (C2-8) is carried out through individual and group performances in assignments, oral presentations, forensic case and role-play exercises in lab and field, individual specialist reports and the journal paper.

Effective communication of ideas is an important criterion in the assessment of all student work. D1-9 are assessed through essays, written reports, oral presentations, forensic case and role-play exercises in lab and field and a journal paper.

#### Learning outcomes for PGCert and PGDip

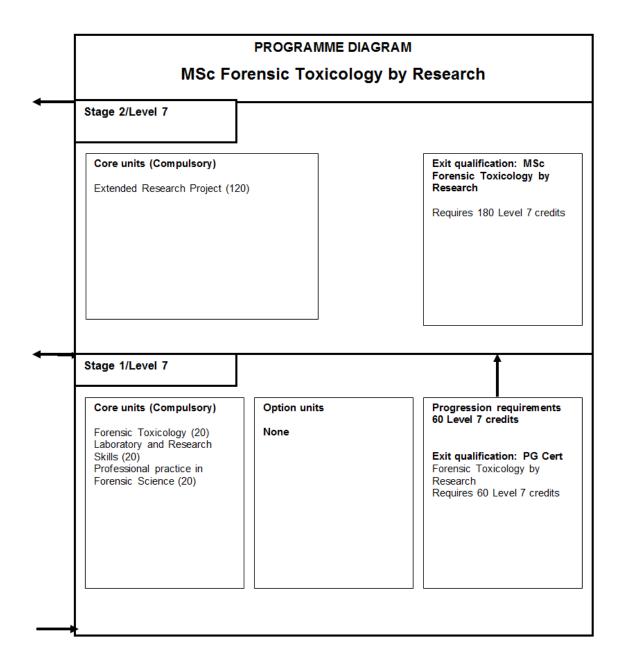
By completing any 60 credits from the taught units on this pathway you will meet the following learning outcomes:

A1, A6, B2, B3, C2, C3, C5, C8, D1, D2, D8

By completing units appropriate for the taught component of this course (excluding the research project) and achieving 120 credits you will meet the following learning outcomes: A1, A2, A4-A6, B1-B3, B6, C1-C5, C8, D1, D2, D7, D8

Sc Forensic	Anthro	pology Programme Skills Matr	ix Templa	te																												
atrix table s	howin	g the relationship between IL	Os for a p	rogramme	and its co	onstituent	units																									
			·																													
			Programn	ne Intende	d Learning	g Outcome	S																									
		Units	A	A	Α	Α	Α	Α	В	В	В	В	В	В	В	С	С	С	С	С	С	С	С	D	D	D	D	D	D	D	D	D
			1	2	3	4	5	6	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	
		Forensic Archaeology	Χ	χ	Х					Х	Χ	Х						Х			Х	Х		X	Х		Х			Х	Х	
		Human Functional Anatomy	X						Χ							X								X	Х				X		Х	
		Principles and Methods in Human Osteology	X						X	х	X					Х	Х	Х						Х	Х		Х		Х	Х	X	
	LEVEL 7	Techniques of Archaeological Recovery and Recording	X								Х													X	X		X			Х	X	
		Bodies of Evidence: Skeletal changes before and after	Х	Х	Х		Х		Х	Х	Х	Х		Х		Х	Х	Х	Х	Х			Х	Х	Х	Х	Х		Х	Х	χ	Х
		Crime Scene Management and Forensic Science					Х	Х			Х	Х	Х		Х			Х	Х	Х	Х	Х		Х	Х			Х		Х	Х	
		Professional Practice in Forensic Science	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х			Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х
		PRP									Х					<u> </u>							Х	Х	Х	Х	Х		Х	Х	Х	Х
- Subject Kno		and Understanding										C - Subjec	t-snecific/P	ractical Skill	s														-		1	-
•	•	nding of Theories, Concepts & Principle	s relevant to	Forensic & B	iological Anth	ropology										cture & physic	ological funct	ion of the ske	letal system	and its interac	ctions with ot	her hody syst	ems									
		thical dimensions of their actions, relev					of conduct									of the range																
-		of forensic anthropology within the lega	-					aw								relevant to for			-	-												
	_	a national and international crime scene		-									-			ethical framew																
nave in-depth ki	now ledg	e & understanding of the role of Coron	er, Forensic I	Pathologist, S	cene of Crim	e Officers, th	e Police , key	international o	organisations	etc.		-				amew orks and																
		pply scientific know ledge & skills in the										_				ate with relev			ensic profess	sionals												
												7 have an e	ffective role	at an archaeo	logical excav	ration, or crime	scene and v	vithin a courtr	room													
												8 analyse, s	ynthesise an	d present info	rmation to a s	specialist and/o	or non techni	cal audience														
Intellectual S	ikills											D - Transfe																				
Identify comple	ete & fraç	gmentary human skeletal material										1 communic	ate effective	ly by oral, w ri	itten and visua	al means																
isplay the abilit	y to effe	ctively & efficiently analyse human ren	nains recover	red from arch	aeological an	ıd forensic co	ontexts					2 effectively	employ IT fa	acilities includ	ding Word pro	ocessing, Pow	erPoint and t	he Web														
itegrate and ev	aluate e	vidence from a range of sources to su	pport finding:	s and hypothe	esize							3 Solve sta	tistical proble	ms using app	oropriate tech	iniques																
nalyse & synt	hesise d	isparate information relevant to forens	sic anthropole	ogy & show th	he ability to c	ommunicate a	and apply this	information a	at a crime sce	ene		4 Analyse	and synthesis	se a range of	experimental	ıl, published anı	d fieldw ork d	lata														
splay the abili	ty to w o	rk constructively and co-operatively, v	v ithin a multic	disciplinary ter	am							5 Work in co	llaboration v	vith others, in	cluding Key P	Practitioners, st	taff & studen	ts & be able	to facilitate &	manage gro	up processes	s, negotiation a	and participat	tion								
oroduce w ritter	n special	list reports & communicate scientific fi	indings to a n	on specialist	audience in a	a court of law						6 Undertake	independent	w ork of an	original nature	e addressed to	o forensic &	biological an	thropology													
Display an in-de	pth unde	erstanding of the planning of projects & t	7 demonstra	ite problem s	olving skills &	the applicatio	on of knowledg	ge across dis	cipline areas																							
			8 be indepe	ndent & refle	ctive learners																											
												Q identify 2	work towards	targets for no	rsonal caroor	r and academic	douplanman	,														

# **MSc Forensic Toxicology by Research**



#### MSc Forensic Toxicology by Research

## PATHWAY CONTEXT, AIMS AND OUTCOMES

#### Introduction

Toxicology, the study of drugs and poisons, is an expanding area of study that offers graduates a wide range of career options. Forensic toxicology is the application of the science and study of drugs and poisons, to questions that arise in judicial proceedings and involves a wide range of case scenarios including drugs/alcohol and driving, drug facilitated sexual assault, workplace drug testing, criminal toxicology and deliberate/malicious poisoning.

Forensic toxicology involves the study of the isolation and analysis of drugs and poisons from a wide variety of matrixes, including human tissues and the effects that these may have on the individual. The course will aim to provide students with a detailed knowledge concerning the selection and collection of case materials, as well as the analytical techniques used in forensic toxicology laboratories for the isolation and identification of drugs and poisons.

Students will study the signs and symptoms associated with the use of common drugs and poisons, basic pharmacology, mechanisms of drug/poison action, drug metabolism and drug elimination from the body. In addition to the more traditional areas of forensic toxicology, the course will introduce students to aspects of environmental forensic science where toxicology may be involved.

An important part of the training of the forensic expert is associated with the presentation of evidence in court and students will undertake training in the preparation and presentation of evidence. The course is delivered by experienced forensic toxicologists and forensic practitioners, with an emphasis on professional capabilities. Wherever possible, the study will be case lead. Our objective is to provide excellent, theoretically informed, science-based learning, as well as research skills.

#### AIMS OF THE PROGRAMME

The widespread growth in the availability of drugs has lead to an expansion in the number of individuals using drugs and drug related crime and this has lead to an expansion in the amount of forensic drug testing and toxicological analysis, undertaken on an international basis. Forensic toxicology in its widest sense encompasses a wide scope, including the analysis of human tissues for the presence of drugs and poisons to assist with the investigation of fatalities, driving under the influence of drugs, sexual assaults and violent crime, as well as the analysis related to environmental and food samples for adulterants and contaminants. Forensic toxicology is undertaken by many organisations including police laboratories, hospitals and a growing number of commercial laboratories. The pathway is intended to provide graduates with a detailed knowledge and understanding of the fundamentals of forensic toxicology, the type and scope of work undertaken and a range of research and analytical skills.

#### PROGRAMME INTENDED LEARNING OUTCOMES

This pathway provides opportunities for students to develop and demonstrate knowledge and understanding, and skills, as follows.

## A Subject Knowledge and Understanding – students will be expected to:

- A1. Have an understanding of the fundamental principles of toxicology and types of cases undertaken by the forensic toxicologist
- A2. Knowledge of the toxicology, pharmacology and toxicological analysis of drugs and poisons, commonly encountered in routine forensic toxicology work
- A3. Familiarisation with the fundamental concepts of forensic science, chain of custody, specimen collection, packaging, report writing and the presentation of evidence in court

- A4. An understanding of the roles of key organisations involved in the regulation and servicing of forensic science relevant UK legislation relevant to forensic science
- A5. Familiarisation with quality systems relevant to forensic science and forensic toxicology and the role of the expert witness, including report / statement writing and the presentation of evidence
- A6. Research and laboratory skills

#### B Intellectual Skills – students will be expected to:

- B1. Analyse approaches used in forensic toxicology casework, illustrated and supported by casework examples and exercises
- B2. Critically evaluate the potentials and limitations of analytical results, obtained from a wide range of matrixes encountered in forensic toxicology
- B3. Know how to apply and adapt analytical principles and methods to specific criminal investigations, to solve routine and unfamiliar problems
- B4. Produce a written specialist report and communicate scientific findings, to a non-specialist audience e.g. in a court of law
- B5. Demonstrate an understanding of fundamental scientific analytical techniques and appreciate how they can be applied to toxicological analyses.
- B6. Plan and complete a research strategy designed to answer a question, create new knowledge, or provide original insights and communicate the results of research effectively

# C Subject-Specific/Practical Skills – students will be expected to:

- C1. Understand basic principles of toxicology
- C2. Gain detailed knowledge concerning the pharmacology, pharmacodynamics and toxicology of drugs of abuse and other drugs of forensic significance and also common inorganic poisons
- C3. Develop an understanding of analytical approaches and instrumentation used in forensic toxicology and develop competence in basic analytical laboratory procedures
- C4. Develop knowledge and understanding in the potential relevance of pharmacogenomics / toxicogenomics to forensic toxicology
- C5. Develop awareness of the growing field of environmental toxicology
- C6. Develop awareness and knowledge of reagents having potential for use as chemical and biological threats

# **D Transferable Skills** – students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Effectively employ IT facilities, including word-processing, spread sheet, database, presentation packages and the Web
- D3. Prepare conference papers

- D4. Analyse and evaluate a range of published and unpublished data
- D5. Undertake independent work of an original nature
- D6. Be independent and reflective learners

#### LEARNING AND TEACHING METHODS AND STRATEGIES

A range of teaching and learning strategies will be employed to provide a varied learning experience. Lectures, practical workshops and laboratory-based sessions, seminar presentations and discussions, individual tutorials and peer assisted learning, will be effectively targeted towards developing the key areas of core subject knowledge and understanding (A1-6), cognitive and intellectual development (B1-6), subject specific practical skills (C1-6) and more general transferable skills and knowledge (D1-6).

During the program, the student will experience a variety of the following:

- formal lectures to introduce new subject material and guide students into project and learning tasks
- seminars / discussion, which will allow students to experience student-centred learning in group discussion and written research skills. These sessions will also allow students to develop confidence in communication and presentation skills and foster interpersonal relationships, as well as encouraging self-criticism and feedback skills
- personal reading assignments
- laboratory exercises to gain practice and familiarity with basic laboratory skills
- a double weighted personal research project.

#### **ASSESSMENT STRATEGIES**

Knowledge and understanding, intellectual skills, subject-specific/practical skills and transferable skills, are summatively assessed entirely through coursework. A range of assessment strategies is employed to enhance the learning experience and to most effectively evaluate the diverse range of learning outcomes. Assessment will be undertaken by written coursework, tests, the submission of a report based on the personal research project and a viva voce examination.

The core knowledge and understanding (A1-6) is assessed through appropriately structured essays (A1, A3 - 5), short-answer tests (A2), specialist reports (A3, A5-6), oral presentations (A1-6) and 'conference papers' (A6). Intellectual skills (B1-6) are assessed through appropriately structured essays and oral presentations. A research proposal, journal paper and viva voce will be used by the student to demonstrate his/her critical thinking skills, to the highest level (B1-6). Subject-specific/practical skills are assessed through appropriately structured essays (C1-5) and oral presentations (C1-6). The journal paper will assess C1 and depending on the chosen topic, a range of other subject-specific and/or practical skills (C2-6). Effective communication of ideas is an important criterion in the assessment of all student work. D1-6 are assessed variously through essays, written reports and papers, database design, oral presentations and a journal paper. Certain assignments are designed to develop particular transferable skills: for example, oral presentations and write-up of 'conference papers' (D1-3) and the personal research project (D4-6).

# Interim award of PG Cert in Forensic Toxicology by Research

This award is only for those students registered on the full programme, but unable to meet the learning outcomes of the extended research project. Students will have met the following learning outcomes to be awarded this interim award

ILOs A1, A3, A4, B1, B5, C1, C2, C4, C5, D1, D2, D6

table	showin	g the relationship betv	veen ILOs	for a prog	ramme an	d its const	ituent unit	s																		
			Programn	ne Intende	Learning (	Outcomes																				
		Units	A	A	A	A	A	A	В	В	В	В	В	В	С	С	С	С	С	С	D	D	D	D	D	D
			1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
		Forensic Toxicology	x	×			x	x		x		x			x	x		x		x		x		x		×
		Laboratory and						v		v		v					v									
	F	Research Skills						^		^		X					^									_ ^
	Ä	Professional																								
	-	Practice in Forensic			X	X	X		X		X						X		X	X				X		X
		Science																								
		Extended PRP						x					×	x							x	x	x	×	x	

#### A Subject Knowledge and Understanding – students will be expected to:

- A1. Have an understanding of the fundamental principles of toxicology and types of cases undertaken by the forensic toxicologist
- A2. Knowledge of the toxicology, pharmacology and toxicological analysis of drugs and poisons, commonly encountered in routine forensic toxicology work
- A3. Familiarisation with the fundamental concepts of forensic science, chain of custody, specimen collection, packaging, report writing and the presentation of evidence in court
- A4. An understanding of the roles of key organisations involved in the regulation and servicing of forensic science relevant UK legislation relevant to forensic science
- A5. Familiarisation with quality systems relevant to forensic science and forensic toxicology and the role of the expert witness, including report / statement writing and the presentation of evidence
- A6. Research and laboratory skills

#### B Intellectual Skills - students will be expected to:

- B1. Analyse approaches used in forensic toxicology casework, illustrated and supported by casework examples and exercises
- B2. Critically evaluate the potentials and limitations of analytical results, obtained from a wide range of matrixes encountered in forensic toxicology
- B3. Know how to apply and adapt analytical principles and methods to specific criminal investigations, to solve routine and unfamiliar problems
- B4. Produce a written specialist report and communicate scientific findings, to a non-specialist audience e.g. in a court of law
- B5. Demonstrate an understanding of fundamental scientific analytical techniques and appreciate how they can be applied to toxicological analyses.
- 6. Plan and complete a research strategy designed to answer a question, create new knowledge, or provide original insights and communicate the results of research effectively

#### C Subject-Specific/Practical Skills – students will be expected to:

- C1. Understand basic principles of toxicology
- C2. Gain detailed knowledge concerning the pharmacology, pharmacodynamics and toxicology of drugs of abuse and other drugs of forensic significance and also common inorganic poisons
- C3. Develop an understanding of analytical approaches and instrumentation used in forensic toxicology and develop competence in basic analytical laboratory procedures
- C4. Develop knowledge and understanding in the potential relevance of pharmacogenomics / toxicogenomics to forensic toxicology
- C5. Develop awareness of the growing field of environmental toxicology
- C6. Develop awareness and knowledge of reagents having potential for use as chemical and biological threats

#### D Transferable Skills - students will be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Effectively employ IT facilities, including word-processing, spread sheet, database, presentation packages and the Web
- D3. Prepare conference papers
- D4. Analyse and evaluate a range of published and unpublished data
- D5. Undertake independent work of an original nature
- D6. Be independent and reflective learners

# **MSc Maritime Archaeology**

# PROGRAMME DIAGRAM **MSc Maritime Archaeology** Stage 2/Level 7 Core units (Compulsory) **Option units** Exit qualification: MSc Maritime Archaeology Research Project (60) Requires 180 Level 7 credits Stage 1/Level 7 **Core units (Compulsory) Option units Progression requirements** 120 Level 7 credits Choose 1 of the following: Techniques of Archaeological Recovery and Recording (20) Management of Archaeological Material (20) Maritime Archaeology (20) Exit qualification: PG Cert Marine Environment, Heritage and Spatial Planning (20) Applied Field Investigation Maritime Archaeology (20) Ancient Ships (20) Requires 60 Level 7 credits Choose 1 of the following: Underwater Cultural Heritage: Exit qualification: PG Dip In Situ Degradation and Maritime Archaeology Preservation (20) Requires 120 Level 7 credits Applied Maritime Archaeology

#### **MSc Maritime Archaeology**

This pathway provides opportunities for students to develop and demonstrate knowledge understanding, and skills, as follows.

## A Subject Knowledge and Understanding – students will be expected to:

- A1. Content and relevance to coastal and marine archaeology of degree studies
- A2. Specific competence with respect to site types found in inland, coastal and marine waters and gain working knowledge of current frameworks for the management of coastal and marine archaeology.
- A3. Assess the relationship between maritime archaeology and the marine environment
- A4. Experience of surveying, excavating, recording and interpreting waterlogged remains, with specific expertise in the investigation of timber structures and/or watercraft
- A5. Familiarity with the principal sources of both terrestrial and marine archaeological data, with their constraints, and with their interpretation

#### **B.** Intellectual Skills – students will be expected to:

- B1. Analyse and synthesise disparate information relevant to maritime archaeology and its environment and show the ability to communicate and apply this information
- B2. Critically evaluate the potential and limitations of maritime archaeological sources and environmental sources and analysis
- B3. Integrate and evaluate evidence from a range of sources to support findings and hypotheses
- B4. Display an understanding of the planning of maritime archaeological projects and how academic research integrates into these
- B5. Produce written specialist reports and communicate maritime archaeological findings to both specialist and non-technical audiences
- B6. Plan and execute a research strategy designed to answer a question, create new knowledge or provide original insights, and communicate the results of the research effectively

## C. Subject Specific/ Practical Skills – students will be expected to:

- C1. Evaluate, bring together and integrate disparate information relevant to maritime archaeology
- C2. Comprehensively understand the wide range of maritime archaeological sites
- C3. Undertake appropriately informed analyses of maritime sites, their degradation and preservation to a high standard
- C4. Gain a critical understanding of the marine environment and its relevance to maritime archaeology and the fundamental principles of site-formation of maritime sites
- C5. Develop a critical awareness of field and analytical techniques that can be applied to the understanding of maritime archaeological sites
- C6. Understand the roles of, and be able to effectively communicate with, relevant archaeological professionals

C7. Planning archaeological field projects (research and project designs, health and safety analysis, budget considerations)

## **D TRANSFERABLE SKILLS** – students be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Effectively employ IT facilities, including word-processing, spread-sheet, database, presentation packages and the Web, preparation of conference presentations/papers
- D3. Plan investigative projects and judge risk appropriately
- D4. Analyse and evaluate a range of published and unpublished data
- D5. Undertake independent work of an original nature and be independent learners
- D6. To produce of project design
- D7. To produce of archaeological field report.

#### **Learning and Teaching Methods and Strategies**

A range of strategies are employed to provide a varied learning experience effectively targeted towards developing the key areas of core subject knowledge and understanding, cognitive and intellectual development, subject-specific practical skills and more general transferable skills and knowledge

Core knowledge and understanding (A1-A9) are acquired through lectures, seminars, practical sessions, workshops, and independent learning. Students are expected to undertake independent reading and to relate the concepts introduced in different units. Where possible, related field trips also add to core knowledge (A4, A6). Feedback on assignments allows students to refine and develop their understanding.

Intellectual skills are developed through lectures and class discussion as well as participation to conferences (B1-B6), practical workshops and projects (B1-B6), seminar work (B1-B4), and individual tutorials (B6). Independent and guided study on the personal research project further enhances intellectual growth in all these areas, especially B6.

Subject specific and practical skills are promoted access to high quality field experiences on suitable maritime archaeological sites taught via a archaeological field school and laboratory-based sessions (C1-8), and further developed through peer-assisted and independent learning. The execution of a dissertation may also involve elements of experiment and test practical skills. Other subject specific skills are obtained via lectures, seminars and participation to conferences (C1, C4-C10), if possible, related field trips (C8).

Transferable skills (D1-D7) are developed through all the learning and teaching methods. Regular feedback on assignments, presentations, workshop and practicals allows students to develop not only their understanding, but also their ability to communicate their ideas (D1, D7).

#### **Assessment Strategies**

Knowledge and understanding, intellectual skills, subject-specific/practical skills and transferable skills are assessed entirely through coursework. A range of assessment strategies are employed to enhance the learning experience and to most effectively evaluate the diverse range of learning outcomes.

Core knowledge and understanding (A1-A6) are assessed through appropriately structured essays, oral exams, specialist reports, oral presentations and 'conference papers'.

Intellectual skills are assessed through appropriately structured essays and specialist reports (B1-B6), oral presentations (B1-B3) and/or 'conference papers' and peer reviewed style articles (B1-B3, B5-

B6). Outcome B6 is also assessed through the execution of a research proposal and dissertation, which allows the student to demonstrate his/her critical thinking skills to the highest level.

Subject-specific/practical skills are assessed through appropriately structured essays (C1, C4, C6-C7), specialist reports (C1-C3), oral presentations (C1, C4-C7) 'conference papers' (C1, C6-C7) and the maritime archaeological filed school (C7). The dissertation will assess C1 and, depending on the chosen topic, a range of other subject-specific and/or practical skills (C2-C7). C8 will not be formally assessed.

Effective communication of ideas is an important criterion in the assessment of all student work. D1-D7 is assessed through essays, written reports and papers, oral presentations and a dissertation. Certain assignments are designed to develop particular transferable skills. For example, oral presentation and write-up of 'conference papers' (D1-D3), and the research project (D6-D9).

#### Programme Skills Matrix Template

Matrix table showing the relationship between ILOs for a programme and its constituent units

		Programm	e Intended	Learning Ou	tcomes																				
	Units	Α	A	A	Α	Α	В	В	В	В	В	В	С	С	С	С	С	С	D	D	D	D	D	D	D
		1	2	3	4	5	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	7
	Management of Archaeological Material			х	x					x		х	x		х			x	x	x					×
,	Maritime Archaeology	x	x				х	х	х			х	x	x					x	x	x	x			
	Tecniques in Archaeological Recovery	×							х										x	x		х			×
	Applied Field Investigation (Maritime)	х	×		х						x			х											x
	Ancient Ships	x				X	x				x		x				x		x	x		x			
7	Marine Environment Heitage ansd Spatial Planing		х			x	x	x		×	x		x		x	х			x	×		x			
	Underwater Cultural Heritage	х	x			x	х	х			x	х	x	x	х				x	x		x	x		
	Applied Maritime Archaeology				x		х	х				х	x												
	PRP			x													x	x					x	×	×

#### A Subject Knowledge and Understanding - students will be expected to:

- A1. Content and relevance to coastal and marine archaeology of degree studies
- A2. Specific competence with respect to site types found in inland, coastal and marine waters and gain working knowledge of current frameworks for the management of coastal and marine archaeology.
- A3. Assess the relationship between maritime archaeology and the marine environment
- A4. Experience of surveying, excavating, recording and interpreting waterlogged remains, with specific expertise in the investigation of timber structures and/or watercraft
- A5. Familiarity with the principal sources of both terrestrial and marine archaeological data, with their constraints, and with their interpretation

#### B. Intellectual Skills - students will be expected to:

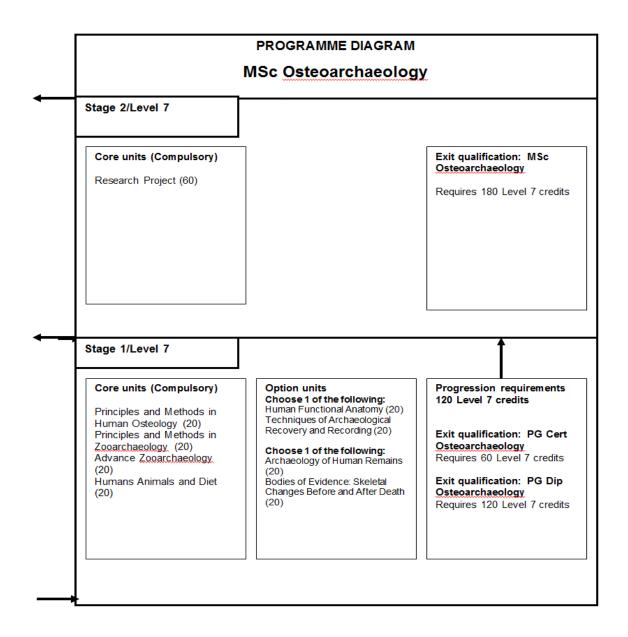
- B1. Analyse and synthesise disparate information relevant to maritime archaeology and its environment and show the ability to communicate and apply this information
- B2. Critically evaluate the potential and limitations of maritime archaeological sources and environmental sources and analysis
- 33. Integrate and evaluate evidence from a range of sources to support findings and hypotheses
- B4. Display an understanding of the planning of maritime archaeological projects and how academic research integrates into these
- Produce written specialist reports and communicate maritime archaeological findings to both specialist and non-technical audiences
- B6. Plan and execute a research strategy designed to answer a question, create new knowledge or provide original insights, and communicate the results of the research effectively

#### C. Subject Specific/ Practical Skills - students will be expected to:

- C1. Evaluate, bring together and integrate disparate information relevant to maritime archaeology
- C2. Comprehensively understand the wide range of maritime archaeological sites
- C3. Undertake appropriately informed analyses of maritime sites, their degradation and preservation to a high standard
- C4. Gain a critical understanding of the marine environment and its relevance to maritime archaeology and the fundamental principles of site-formation of maritime sites
- C5. Develop a critical awareness of field and analytical techniques that can be applied to the understanding of maritime archaeological sites
- C6. Understand the roles of, and be able to effectively communicate with, relevant archaeological professionals
- C7. Planning archaeological field projects (research and project designs, health and safety analysis, budget considerations)

#### D TRANSFERABLE SKILLS - students be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Effectively employ IT facilities, including word-processing, spread-sheet, database, presentation packages and the Web, preparation of conference presentations/papers
- D3. Plan investigative projects and judge risk appropriately
- D4. Analyse and evaluate a range of published and unpublished data
- D5. Undertake independent work of an original nature and be independent learners
- D6. To produce of project design
- D7. To produce of archaeological field report.



## **MSc Osteoarchaeology**

#### ACADEMIC AND PROFESSIONAL CONTEXTS

#### Introduction

MSc Osteoarchaeology was originally established in 1998. It formed one of a suite of Master's courses within the School (now Department), which were designed to provide students with detailed specialist knowledge within the areas of environmental and geographical sciences, archaeology and heritage conservation. This course has gained an excellent reputation nationally and internationally. Historically it has shared close links with MSc Forensic and Biological Anthropology. The revised version of this Masters sees the coalescence of MSc Zooarchaeology and MSc Human Osteoarchaeology, to provide a single integrated programme.

The Department of Archaeology, Anthropology and Forensic Sciences, includes academics of international renown, who have active research interests in archaeology, osteoarchaeology, zooarchaeology, biological anthropology and forensic sciences. These staffing resources are supported by excellent dedicated teaching collections within the Department of Archaeology, Anthropology and Forensic Sciences, along with a wide range of other scientific equipment and IT hardware. The Department therefore continues to be well placed to offer the MSc in Osteoarchaeology. The pathway will cater for archaeology or life science graduates wishing to specialise in this field. It will provide them with:

- a core of theory, knowledge, tools and methods that define the integrated osteoarchaeological field
- training for future research and a career within the field of osteoarchaeology
- a sound understanding of how studies of human and animal remains can be integrated into general archaeological research and practice.

Animal bones and human remains are amongst the most common finds on archaeological excavations of all periods. They can provide abundant information about past human populations, their behaviour and beliefs, diet, economy and the natural world. The archaeological profession has an established and increasing need for staff with osteoarchaeological training, to assist in interpretation of archaeological sites and understanding the human experience in the past, particularly their relationship with animals. The pathway aims to enhance career opportunities for graduates from a variety of fields and for practising archaeologists seeking to expand their expertise. The subdisciplines of human and animal osteoarchaeology have much in common at a core level. By covering both human and animal remains, this course affords students a breadth of knowledge, while leaving them well placed to specialise further through their choice of unit options and research project. The pathway provides an excellent foundation for those wishing to pursue careers as specialist osteoarchaeological practitioners, researchers and academics within the archaeological profession.

# **AIMS OF THE PROGRAMME**

The overall aim of this pathway is to provide students with a sound and detailed knowledge and critical understanding of osteoarchaeological principles and methods, for all theoretical and practical activities related to human and animal skeletal remains, from archaeological contexts. Such knowledge and understanding are set within the wider context and perspective of archaeological studies, as well as exploring evolutionary and palaeoenvironmental themes. These aims cannot be gained solely by theoretical academic studies and practical experience of the methods and techniques used for recording and analysing osteological remains is imperative.

This vocationally-orientated pathway aims to provide its graduates with advanced and applied knowledge and understanding of:

- Human skeletal anatomy and bone science
- Identification of major species of animals found on European archaeological sites
- Methods of analysis and recording of human and animal skeletal assemblages

- Methods of age and sex assessment
- The application of biometrical analyses in the study of human and animal bones
- Taphonomic processes and their effects on human and animal skeletal remains
- Disease processes in past human populations
- Major themes in the history of animal exploitation for food
- The role of animal remains in palaeoenvironmental studies
- The use of appropriate databases and statistical methods for effective analysis of human and animal bone assemblages
- An understanding of scientific analytical techniques and how they may be applied to osteoarchaeological material.

## PATHWAY INTENDED LEARNING OUTCOMES

This pathway provides opportunities for students to develop and demonstrate knowledge and understanding, and skills, as follows.

# A. Subject Knowledge and Understanding – students will be expected to:

- A1. Have a critical understanding of and the ability to, evaluate relevant theories, concepts and principles relevant to human osteoarchaeology
- A2. Have a critical understanding of and the ability to, evaluate relevant theories, concepts and principles relevant to zooarchaeology
- A3. Have comprehensive knowledge of the gross skeletal anatomy of adult and juvenile humans
- A4. Obtain a wide-range of practical skills, including the ability to judge appropriate use of recording, analytical and statistical methods commonly used by osteoarchaeological specialists
- A5. Demonstrate an understanding of scientific analytical techniques and appreciate how they can be applied to osteoarchaeological analyses
- A6. Understand the multidisciplinary nature of the pathway and the need to apply knowledge from a range of subject areas.

#### B. Intellectual Skills – students will be expected to:

- B1. Analyse and synthesise disparate information relevant to osteoarchaeology and show the ability to communicate and apply this information
- B2. Produce written specialist reports and communicate osteoarchaeological findings to both specialist and non-technical audiences
- B3. Critically evaluate the potential and limitations of osteoarchaeological analysis
- B4. Integrate evidence from a range of sources to support findings and hypotheses
- B5. Display an understanding of the planning of archaeological projects, or projects in related disciplines and how osteoarchaeological research integrates into these

B6. Plan and execute a research strategy designed to answer a question, create new knowledge or provide original insights and communicate the results of the research effectively

# C. Subject-Specific/Practical Skills – students will be expected to:

- C1. Evaluate, bring together and integrate disparate information relevant to osteoarchaeology
- C2. Undertake appropriately informed identification and analyses of complete and fragmentary human and faunal skeletal remains, to a high standard
- C3. Demonstrate knowledge and critical understanding of any of the following: the presentation and causes of a range of skeletal pathologies; past environmental change; hominid evolution
- C4. Show a good understanding of the fundamental principles of site-formation and taphonomic processes, including the recovery of osseous materials
- C5. Demonstrate a detailed knowledge of the history of exploitation of animals and their contribution to human diet
- C6. Develop a critical awareness of analytical techniques that can be applied to the understanding of past human diets, past environmental change and/or hominid evolution
- C7. Understand the roles of and be able to, effectively communicate with relevant archaeological professionals

# **D** Transferable Skills – students be expected to:

- D1. Communicate effectively by oral, written and visual means
- D2. Effectively employ IT facilities, including word-processing, spreadsheet, Database, presentation packages and the Web
- D3. Prepare conference papers
- D4. Design and make effective use of relational databases
- D5. Apply appropriate statistical techniques
- D6. Analyse and evaluate a range of published and unpublished data
- D7. Undertake independent work of an original nature
- D8. Be independent and reflective learners
- D9. Demonstrate problem solving skills and the application of knowledge across discipline areas

## **LEARNING AND TEACHING METHODS AND STRATEGIES**

A range of strategies are employed to provide a varied learning experience, effectively targeted towards developing the key areas of core subject knowledge and understanding, cognitive and intellectual development, subject-specific practical skills and more general transferable skills and knowledge.

Core knowledge and understanding (A1-6) is acquired through lectures, seminars, practicals, workshops and independent learning. Students are expected to undertake independent reading and to relate the concepts introduced in different units (A1-2, A5-6). Practical identification skills and anatomical knowledge (A3-4) are enhanced by independent study of skeletal material. Where possible, related field trips also add to core knowledge (A6). Feedback on assignments allows students to refine and develop their understanding.

Intellectual and cognitive skills are developed through lectures and class discussion (B1-6), practical workshops and projects (B1-5), seminar work (B1, B3-5) and individual tutorials (B6). Independent and guided study on the personal research project further enhances intellectual growth in all these areas, especially B6.

Subject specific and practical skills are promoted through zooarchaeological workshops and anthropological laboratory practical sessions (C2-5) and further developed through peer-assisted and independent learning. The execution of a journal paper may also involve elements of experiment and test practical skills. Other subject specific skills are obtained via lectures and seminars (C1, C4-7) and if possible, related field trips (C7).

Transferable skills (D1-9) are developed through all the learning and teaching methods. Regular feedback on assignments, presentations, workshop and practicals allows students to develop not only their understanding, but also their ability to communicate their ideas (D1, D8).

#### **ASSESSMENT STRATEGIES**

Knowledge and understanding, intellectual skills, subject-specific/practical skills and transferable skills, are summatively assessed entirely through coursework. A range of assessment strategies is employed to enhance the learning experience and to most effectively evaluate the diverse range of learning outcomes.

The core knowledge and understanding (A1-6) is assessed through appropriately structured essays, short-answer practical identification and recording tests, specialist reports, oral presentations and 'conference papers'.

Intellectual skills are assessed through appropriately structured essays (B1, B3-4), practical identification tests (B3-4), specialist reports (B1-5), oral presentations (B1-4) and 'conference papers' (B1-4). Outcome B6 is assessed through the execution of a research proposal and a journal paper, which allows the student to demonstrate his/her, critical thinking skills to the highest level.

Subject-specific/practical skills are assessed through appropriately structured essays (C1, C4, C6-7), short answer and practical identification 'spotter' tests (C2-5), specialist reports (C1-6 and 8), oral presentations (C1-2, C4, C6-7) and 'conference papers' (C1, C6-7). The journal paper will assess C1 and depending on the chosen topic, a range of other subject-specific and/or practical skills (C2-7).

Effective communication of ideas is an important criterion in the assessment of all student work. D1-9 are assessed variously through essays, written reports and papers, database design, oral presentations and a journal paper. Certain assignments are designed to develop particular transferable skills. For example, oral presentations and write-up of 'conference papers' (D1-3), data extraction from a zooarchaeological database and preparation of a zooarchaeological recording scheme (D2, D4) and the personal research project (D6-7).

# **ASSESSMENT REGULATIONS**

The regulations for this framework are the University's Standard Postgraduate Regulations.

# Learning outcomes for PGCert and PGDip

By completing any 60 credits from the taught units on this pathway you will meet the following learning outcomes:

A1, A6, B1, B2, C3, C6, D1, D2, D8

By completing units appropriate for the taught component of this course (excluding the research project) and achieving 120 credits you will meet the following learning outcomes: A1-A4, A6, B1, B2, B5, C2, C3, C5, C6, D1, D2, D8

		Programm	e Intended	Learning	Outcomes																							
	Units	A	A /	A	A	A	A	В	В	В	В	В	В	C	C	C	C	c	C	C	D	D	D	D	D	D	D	D
	Human Functional	X	2 3	X	4 X	5	ь	1	2	3	4 X	5	Х	X	2 X	3	4	5	ь	/	1	2 X	3	4	5	ь	/	в Х
	Anatomy	^		^	^						-		^	_^_	^							_^						^
	Principles and Methods in Human Osteology	×			×	×	×	×		×	×		×	×	×						×	×						×
	Principles and Methods in Zooarchaeology	×	×		х	×	×	×			×		×	×	×			×	×		×	x		×				×
	Techniques of																											
ÆL7	Archaeological Recovery and Recording	×	×		×	×	×				×		×	×			×			×	×	×			×			X
IEVEI	Advanced		х				×				х		х				x	х	х	х	x	х						x
	Zooarchaeology Archaeology of Human	.,	^														<u> </u>	<u> </u>	<u> </u>									
	Remains Bodies of Evidence:	Х					X				х		Х			х				х	х	х						х
	Spatial Changes before and after	×			×		×	×	×	×	×		×	×	×	×	×	×	×		×	×			×			×
	Humans Animals and Diet	×					×				х		×			×		x	х		×	х						×
						х						х									x		×	х	х	х	х	×
	PRP					^						_^									_^_		_^	^	_^_	_ ^	^	^
	A Subject	Knowledge	and Under	rstanding	students	will be exp	ected to:																					
	A1 have a	ritical unde	erstanding o	of and the	ability to, e	valuate re	levant the	ories, conce	pts and pr	inciples rel	evant to h	ıman oste	oarchaeolo	gy														
	A2 have a	ritical unde	erstanding o	of and the	ability to, e	valuate re	levant the	ories, conce	pts and pr	inciples rel	evant to zo	oarchaeol	ogy															
	A3 have co	mprehensi	ve knowledg	ge of the g	ross skelet	al anatom	y of adult a	nd juvenile	humans																			
	A4 obtain	wide-rang	e of practica	al skills, in	cludingthe	ability to j	udge appr	opriate use	of recordi	ng, analyti	cal and stat	istical met	hods comm	nonly used	by osteoa:	rchaeologic	cal specialis	ts										
	A5 demon	strate an un	derstanding	g of scient	ificanalytic	cal techniq	ues and ap	preciate ho	w they car	n be applie	d to osteoa	archaeolog	calanalyse	s														
	A6 unders	and the mu	ıltidisciplina	ary nature	of the path	way and ti	ne need to	apply knov	vledge fror	n a range o	f subject a	reas.																
	B Intellec	tual Ekille	students wi	ill be even	etad to																							
			sise dispara																									
														ion														
			ecialistrepo						o both spe	cialist and r	non-techni	calaudien	es															
			he potential																									
			from a rang																									
			anding of the																									
	B6 plan an	i execute a	research str	rategy des	igned to ar	nswer a qu	estion, cre	ate new kn	owledge o	r provide o	riginal insi	ghts and co	mmunicate	the resul	ts of the re	search effe	ectively											
	C Subject	-Specific/P	ractical Skill	ls-studer	nts will be e	expected to	):																		1			
	C1 evaluat	e, bring tog	ether and in	ntegrate d	isparate in	formation	relevant to	osteoarch	aeology																			
	C2 underta	ike appropr	iately inforr	med ident	ification an	ıd analyses	of comple	te and frag	mentary hi	uman and f	aunal skel	etal remair	ıs, to a high	standard														
			ledge and ci												rironmenta	al change; h	nominid ev	olution										
			rstanding of																									
			ailed knowle																									
	1		wareness of									nast envi r	onmentalci	hange and	/or homini	id evolutio	n											
	-		es of and be									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		8	,													
	C, dilders	and the roi	e y or und be	. ubic to, c	cc.ively	communic	acc within	ic vanicaren	acorogrea	proression																		
	1																											
	D Transfe	rable Skills	– students l	be expect	ed to:																							
	-		– students b			Imeans																						
	D1 commu	nicate effe	ctively by ora	al, writter	and visual		eadsheet,																					
	D1 commu D2 effectiv Databa:	nicate effe ely employ se, presenta	ctively by ora IT facilities, ation packag	al, writter	and visual		eadsheet,																					
	D1 commu D2 effectiv Databa: D3 prepare	nicate effer ely employ se, present conferenc	ctively by ora IT facilities, ation packag e papers	al, writter , including ges and the	n and visual word-proc e Web	essing, spr	eadsheet,																					
	D1 commu D2 effectiv Databa D3 prepare D4 design:	nicate effect ely employ se, present conference and make e	ctively by ora IT facilities, ation packag e papers ffective use	ral, writter , including ges and the	n and visual word-proc e Web nal databas	essing, spr	eadsheet,																					
	D1 commu D2 effectiv Databa D3 prepare D4 design: D5 apply a	nicate effer ely employ se, present conferenc and make el opropriate:	ctively by ora IT facilities, ation packag e papers ffective use statistical te	al, written including ges and the of relation	n and visual word-proc e Web nal databas	essing, spr																						
	D1 commu D2 effectiv Databa D3 prepare D4 design: D5 apply a	nicate effer ely employ se, present conferenc and make el opropriate:	ctively by ora IT facilities, ation packag e papers ffective use	al, written including ges and the of relation	n and visual word-proc e Web nal databas	essing, spr																						
	D1 commu D2 effectiv Databa D3 prepare D4 design: D5 apply a D6 analyse	nicate effectively employing, presentation conference and make eleptropriate and evalua	ctively by ora IT facilities, ation packag e papers ffective use statistical te	al, written, including ges and the of relation echniques	n and visual word-proc e Web nal databas	essing, spr																						
	D1 commu D2 effectiv Databa D3 prepare D4 design D5 apply a D6 analyse D7 underts	nicate effer ely employ ie, presenta conference and make el propriate s and evalua	ctively by ora IT facilities, ation packag e papers ffective use statistical te	ral, written, including ges and the of relation echniques of published of an origin	n and visual word-proc e Web nal databas	essing, spr																						

# WORK-BASED LEARNING (WBL) / PLACEMENTS ELEMENTS (Undergraduate)

Work-based learning requirements are met through professional practice placements please see Placement Handbook – note this is the existing placement handbook for the Applied Sciences framework

Bournemouth University programmes offer an optional minimum 30 week placement which forms the third year of a four-year sandwich degree, and this option is provided in the proposed programme and the entire framework. In addition to this, many undergraduate degree programmes require students to undertake a short placement of a minimum of 25 working days which will normally run during the summer between years 1 and 2 and is ratified as part of Level 5 of the programme. Students on Archaeology or Archaeology and Forensic Science Programmes who do not enrol on a 4-year degree will complete a short placement between the second and final years of their study. There is opportunity for voluntary Placement for programmes that do not require a short placement, there is no credit awarded for this activity but recognition is made in the student profile for use in references etc.

Programme	A) Short Placement	B) Minimum 30 Week Placement	If (B) chosen what is required A&B	If B not Chosen
Anthropology	N/A	✓	Just B	Voluntary placement
				possible
Archaeology	✓	✓	A or B	Just A
Archaeology and Anthropology	N/A	✓	Just B	voluntary placement possible
Archaeological, Anthropological	✓	✓	A or B	Just A
and Forensic Sciences.				
Forensic Science	N/A	✓	Just B	voluntary placement possible
Forensic Investigation	N/A	✓	Just B	voluntary placement possible
Forensic Biology	N/A	✓	Just B	voluntary placement possible

Placements involve the completion of activities/projects and are assessed via a portfolio of evidence, including logs/diaries and reflective essays, collated over the placement period and assessed as either pass or fail depending on whether the portfolio is complete. This evidence will include a satisfactory host report. Placements are not credit-weighted and are normally unpaid, although some employers may offer expenses. In the past, a number of students have secured placements through the STEP project, which guarantees payment for an eight-week placement.

Placements can be undertaken in any part of the UK or abroad (any additional cost borne by the student) and are approved by the Department on the basis of the registration details provided by the student. Students are expected to be proactive at every stage of researching and obtaining appropriate placement offers. Their efforts are supported throughout by the Placement and Programmes Co-ordinator, who provides guidance and brings opportunities to the attention of students. Throughout Level 4 and Level 5 students are counselled on work experience opportunities and personal development activities are provided to enable students to produce a CV, complete application forms, compile and maintain a portfolio and develop interview and presentation skills.

The framework team already have a wide range of external links to potential placement organisations and a searchable database of placement hosts is available to students via myBU. A wide range of hosts is available to reflect the diverse interests of the students studying on different programmes.

The placement aims to provide students with:

- A wider experience within practice plus a detailed knowledge of an area of discipline within which the student may wish to work once graduated
- An understanding of the inter-relationship of practitioner and management skills in the context of the host organisation
- An opportunity to apply the knowledge and skills, gained from studies, in the work environment
- An experience of work roles, practices and procedures, working relationships and interpersonal communications, employment, working hours and practical constraints, within the working environment
- An opportunity to develop personal and career plans in the light of the experiences derived from the placement.

The placement thus provides students with the experience of how an organisation operates, as well as an opportunity to enhance their personal development and future employability. The placements play an important role within the degree structure, complementing the academic programme and allow students to begin to put theory and competencies into practice as well as develop new skills. The placements especially articulate with the skills unit at Level 4, along with Field and Laboratory

work and field trips and similar units at Level 4 and 5, and may also articulate with the Research Project at Level 6.

There is no requirement for placements in level 7.

# **ADMISSION REGULATIONS**

The regulations for this framework/programme are the University's Standard Undergraduate and Postgraduate Regulations with the following exceptions: Applicants whose mother tongue is not English must offer evidence of qualifications in written and spoken English. Acceptable qualifications are:

IELTS (academic) 6.5 (with a minimum of 5.5 in each of four categories) or direct equivalent.

The University's Standard Admission Regulations are available on the Staff Intranet and can be found at https://intranetsp.bournemouth.ac.uk/Documents/arpptop.aspx

## **ASSESSMENT REGULATIONS**

The regulations for this Framework are the University's Standard Undergraduate and Postgraduate Regulations.'

The University's Standard Assessment Regulations are available on the Staff Intranet and a link should is included. https://intranetsp.bournemouth.ac.uk/Documents/arpptop.aspx

# **PROGRAMME PROFILES**

# BSC (HONS) ANTHROPOLOGY - PROGRAMME STRUCTURE

Programme Award and Title: BSc (Hons) Anthropology

# Year 1/Level 4

Students are required to complete all 6 credit bearing core units

Unit Name	Core/ Option	No of credits	Assessmer Weighting		t	Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
AAFS Study Skills	Core	20		70	30	40	v 1.13	101090
Ancient Peoples and Places	Core	20	50	50		40	v1.12	100299 / 100436
Introduction to Social Theory	Core FHSS	20	100			30	v3.0	100628
Human Anatomy and Physiology	Core FHSS	20		50	50	40	v1.2	100264
Introduction to Social Anthropology	Core FHSS	20	50	50		30	v3.0	100437
Studying Ancient Materials	Core	20		50	50	40	v1.12	100384 / 100299

**Progression requirements:** Requires 120 credits at Level 4.

Exit qualification: Cert HE Anthropology (requires 120 credits at Level 4).

# Programme Award and Title: BSc (Hons) Anthropology

# Year 2/Level 5

Students are required to complete 4 credit bearing core units and 2 credit bearing option units

Unit Name	Core/ Option	No of credi	Assessm Weightin		ent	Expected contact	Unit version	HECoS Subject Code
	Option	ts	Exam	Cwk	Cwk 2	hours per	no.	Coue
			1	1		unit		
Archaeological Science	Core	20	50	50		40	v1.12	100384
Becoming Human	Core	20	50	50		40	v1.12	100663 /
								100437
Themes in Archaeology and	Core	20	50	50		40	v1.12	100299 /
Anthropology								100436
Growing Up and Growing Old	Core	20			50	30	v2.1	100437
	FHSS			50				
	Option	20		100		30	v2.0	100437
Understanding Cultures	FHSS							
Rome and Barbarian Europe	Option	20	50	50		50	v1.12	100299 /
								101440
Societies of Prehistoric Europe	Option	20	50	50		40	v1.12	100299
Environmental and Societal	Option	20		50	50	40	v1.1	100408
Challenges	LES							
	Option	20		30	70	30	v3.0	100505
Understanding Globalisation	FHSS							

**Progression requirements:** Requires 120 credits at Level 5.

Exit qualification: Dip HE Anthropology (requires 120 credits at Level 5).

# Year 3/Level P - Optional placement year in industry/business

The optional sandwich placement year is taken between Levels 5 and 6.

**Progression requirements:** Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

# Programme Award and Title: BSc (Hons) Anthropology

# Year 3/Level 6

Students are required to complete 2 credit bearing core units (one double-weighted) and 3 credit bearing option units

Unit Name	Core/ Optio	No of credit	Assess Weight	ment El ings	ement	Expected contact	Unit version	HECoS Subject Code
	n	s	Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Independent Research Project (AAFS)	Core	40		100			v1.11	100962
The Science of Human Remains	Option	20		50	50	40	v1.12	101218
Animals and Society	Option	20	50	50		40	v1.12	100299
Cultural Ecology	Core	20	50	50		36	v1.12	100388
Primate Behavioural Ecology	Option LES	20		20	80	40	v1.2	100522
Anthropology of International Intervention	Option FHSS	20		100		30	v2.0	100437
Seekers, Believers and Iconoclasts: Sociology of thought	Option FHSS	20		100		30	v2.0	100505
Food, Culture and Travel	Option FM	20		50	50	40	v1.2	100875 / 101233

Progression requirements: Requires 120 credits at Level 6.

Exit qualification: BSc (Hons) Anthropology (requires 120 credits at Level 6).

# BSC (HONS) ARCHAEOLOGY AND ANTHROPOLOGY - PROGRAMME STRUCTURE

Programme Award and Title: BA (Hons) Archaeology and Anthropology

# Year 1/Level 4

Students are required to complete all 6 credit bearing core units

Unit Name	Core/ Option	No of credits	Assess Weight	ment El	ement	Expected contact	Unit version	HECoS Subject Code
	-		Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
AAFS Study Skills	Core	20		70	30	40	v1.13	101090
Ancient Peoples and Places	Core	20	50	50		40	v1.12	100299 / 100436
Approaches to Archaeology	Core	20	50	50		52	v1.12	100299
Archaeological Practice	Core	20		60	40	40	v1.1	10229
Introduction to Social Anthropology	Core FHSS	20	50	50		30	3.0	100437
Gathering Time	Core	20		50	50	40	v1.12	100384

Progression requirements: Requires 120 credits at Level 4.

Exit qualification: Cert HE Archaeology and Anthropology (requires 120 credits at Level 4).

Programme Award and Title: BSc (Hons) Archaeology and Anthropology

# Year 2/Level 5

Students are required to complete 4 credit bearing core units and 2 credit bearing option units

Unit Name	Core/ Option	No of credits	Assess Weight	ment El	lement	Expected contact	Unit version	HECoS Subject Code
	-		Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Field and Research Skills	Core	20		50	50	40	v1.12	100299
Post Excavation Skills	Core	20		100		40	v1.12	100299
Themes in Archaeology and Anthropology	Core	20	50	50		40	v1.12	100299 / 100436
Societies of Prehistoric Europe	Core	20	50	50		40	v1.12	100299
Becoming Human	Option	20	50	50		40	v1.12	100663 / 100437
Maritime Archaeology	Option	20		50	50	40	v1.12	101261
Rome and Barbarian Europe	Option	20	50	50		50	v1.12	100299 / 101440
Archaeological Science	Option	20	50	50		40	v1.12	100384
Understanding Cultures	Option FHSS	20		100		30	v2.0	100437
Growing Up and Growing Old	Option FHSS	20		50	50	30	v3.0	100437

Progression requirements: Requires 120 credits at Level 5.

Exit qualification: Dip HE Archaeology and Anthropology (requires 120 credits at Level 5).

The optional sandwich placement year is taken between Levels 5 and 6.

Progression requirements: Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

#### Programme Award and Title: BSc (Hons) Archaeology and Anthropology

#### Year 3/Level 6

Students are required to complete 2 credit bearing core units (one double-weighted) and 3 credit bearing option units

Unit Name	Core/ Option	No of credits			Expected contact	Unit version	HECoS Subject Code	
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Independent Research Project (AAFS)	Core	40		100		por arm	v1.1	100962
Cultural Ecology	Core LES	20	50	50		36	v1.1	100388
Archaeological Management	Core	20	50	50		44	v1.1	100299
Later Prehistoric Britain	Option	20	50	50		40	v1.1	100299 / 101439
Animals and Society	Option	20	50	50		40	v1.12	100299
Roman Britain	Option	20	50	50		50	v1.12	100299
Sarup to Stonehenge: Neolithic and Chalcolithic Northwest Europe	Option	20	50	50		54	v1.12	100299 / 101437
Primate Behavioural Ecology	Option LES	20		20	80	40	v1.2	100522
Anthropology of International Intervention	Option FHSS	20		100		30	v2.0	100437
Seekers, Believers and Iconoclasts: Sociology of thought	Option FHSS	20		100		30	v2.0	100505

Progression requirements: Requires 120 credits at Level 6.

Exit qualification: BA (Hons) Archaeology and Anthropology (requires 120 credits at Level 6).

#### BSC (HONS) ARCHAEOLOGY - PROGRAMME STRUCTURE

Programme Award and Title: BSc (Hons) Archaeology

#### Year 1/Level 4

Students are required to complete all 6 credit bearing core units

Unit Name	Core/ Option	No of credits	Assessment Element Weightings			Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
AAFS Study Skills	Core	20		70	30	40	v1.13	101090
Ancient Peoples and Places	Core	20	50	50		40	v1.12	100299 / 100436
Approaches to Archaeology	Core	20	50	50		52	v1.12	100299
Archaeological Practice	Core	20		60	40	40	v1.1	100299
Gathering Time	Core	20		50	50	40	v1.12	100384
Studying Ancient Materials	Core	20		50	50	40	v1.12	100384 / 100299

Progression requirements: Requires 120 credits at Level 4.

Exit qualification: Cert HE Archaeology (requires 120 credits at Level 4).

#### Programme Award and Title: BSc (Hons) Archaeology

#### Year 2/Level 5

Students are required to complete 4 credit bearing core units and 2 credit bearing option units

Unit Name	Core/ Option	No of credits	Assessment Element Weightings			Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Archaeological Science	Core	20	50	50		40	v1.12	100384
Field and Research Skills	Core	20		50	50	40	v1.12	100299
Post Excavation Skills	Core	20		100		40	v1.12	100299
Environmental Archaeology	Core	20	50	50		40	v1.1	100384
Becoming Human	Option	20	50	50		40	v1.12	100663 / 100437
Geographic Information Systems	Option LES	20		50	50	36	v2	100369
Maritime Archaeology	Option	20		50	50	40	v1.12	101261
Rome and Barbarian Europe	Option	20	50	50		50	v1.12	100299 / 101440
Societies of Prehistoric Europe	Option	20	50	50		40	v1.12	100299

Progression requirements: Requires 120 credits at Level 5.

Exit qualification: Dip HE Archaeology (requires 120 credits at Level 5).

The optional sandwich placement year is taken between Levels 5 and 6.

**Progression requirements:** Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6

#### Programme Award and Title: BSc (Hons) Archaeology

#### Year 3/Level 6

Students are required to complete 2 credit bearing core units (one double-weighted) and 3 credit bearing option units

Unit Name	Core/ Option	No of credits	Assess Weight	ment El	ement	Expected contact	Unit version	HECoS Subject Code
	·		Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Independent Research Project (AAFS)	Core	40		100		40	v1.11	100962
Archaeological Management	Core	20	50	50		44	v1.1	100299
Emergence and Extinction: Reconstructing Pliocene and Pleistocene Environments	Option LES	20	50	50		40	v1.1	100398
Later Prehistoric Britain	Option	20	50	50		40	v1.1	100299 / 101439
The Science of Human Remains	Option	20		50	50	40	v1.12	101218
Animals and Society	Option	20	50	50		40	v1.12	100299
Roman Britain	Option	20	50	50		50	v1.12	100299
Sarup to Stonehenge: Neolithic and Chalcolithic Northwest Europe	Option	20	50	50		54	v1.12	100299 / 101437

Progression requirements: Requires 120 credits at Level 6.

Exit qualification: BSc (Hons) Archaeology (requires 120 credits at Level 6).

# BSC (HONS) ARCHAEOLOGICAL, ANTHROPOLOGICAL AND FORENSIC SCIENCES PROGRAMME STRUCTURE

# Programme Award and Title: BSc (Hons) Archaeological, Anthropological and Forensic Sciences

Year 1, Level 4

Students are required to complete all 6 credit bearing core units

Unit Name	Core/ Option	No of credits		Assessment Element Weightings		Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Chemistry	Core	20	50	50		40	v1.1	100413
Introduction to Forensic Investigation	Core	20	50	50		40	v1.12	100388
AAFS Study Skills	Core	20		70	30	40	v1.13	101090
Archaeological Practice	Core	20		50	50	40	v1.1	100299
Introduction to Social Anthropology	Core	20	50	50		40	v1.1	100437
Studying Ancient Materials	Core	20		50	50	40	v1.12	100384/100299

Progression requirements: Requires 120 credits at Level 4.

Exit qualification: Cert HE Archaeological, Anthropological and Forensic Sciences

Programme Award and Title: BSc (Hons) Archaeological, Anthropological and Forensic Sciences

#### Year 2, Level 5

Students are required to complete 4 credit bearing core units and 2 option units

Unit Name	Core/ Option	No of credits	Assess Weight	ment El	ement	Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Archaeological Science	Core	20	50	50		40	v1.12	100384
Crime Scene	Core	20	50	50		40	v1.1	101222
Field and Research Skills	Core	20		50	50	40	v1.12	100299
Forensic Science	Core	20	50	50		40	v1.1	100388
Becoming Human	Option	20	50	50		40	v1.12	100663/100437
Environmental Archaeology	Option	20	50	50		40	v1.1	100384
Introduction to Toxicology	Option	20	50	50		40	v1.1	100277

Progression requirements: Requires 120 credits at Level 5.

Exit qualification: Dip HE Archaeological, Anthropological and Forensic Sciences

#### Year 3/Level P - Optional placement year in industry/business

The optional sandwich placement year is taken between Levels 5 and 6.

**Progression requirements:** Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

# Programme Award and Title: BSc (Hons) Archaeological, Anthropological and Forensic Sciences

#### Year 3, Level 6

Students are required to complete 4 credit bearing core units and 1 option unit

Unit Name	Core/ Option	No of credits	Assessment Element Weightings			Expected contact	Unit version	HECoS Subject Code
	-		Exam	Cwk	Cwk	hours	no.	
			1	1	2	per unit		
Advanced Forensic Science	Core	20	50	50		40	v1.1	100388
The Science of Human Remains	Core	20		50	50	40	v1.12	101218
Archaeological Management	Core	20	50	50		44	v 1.1	100299
Independent Research Project (AAFS)	Core	40		100		40	v1.1	100962
Animals and Society	Option	20	50	50		40	v1.12	100299
Forensic Practice	Option	20	50	50		40	v1.1	101222
Primate Behavioural Ecology	Option LES	20		20	80	40	v1.2	100522
Roman Britain	Option	20	50	50		50	v1.12	100299
Sarup to Stonehenge: Neolithic and Chalcolithic Northwest Europe	Option	20	50	50		54	v1.12	100299/101437

Progression requirements: Requires 120 credits at Level 6.

Exit qualification: BSc (Hons) Archaeological, Anthropological and Forensic Sciences

# BSC (HONS) FORENSIC BIOLOGY – PROGRAMME STRUCTURE

Programme Award and Title: BSc (Hons) Forensic Biology

Year 1/Level 4

Students are required to complete all 6 credit bearing core units

Unit Name	Core/ Option	No of credits	Assessment Element Weightings			Expected contact	Unit version	HECoS Subject Code
	-		Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Forensic Research Skills	Core LES	20		30	70	39	v1.0	100388
Cell Biology	Core LES	20	30	70		40	v1.1	100822
Chemistry	Core	20		50	50	40	v1.1	100413
Human Anatomy and Physiology	Core FHSS	20		50	50	40	v1.2	100264
Diversity of Life	Core LES	20	50	50		40	v1.1	100346
Introduction to Forensic Investigation	Core	20	50	50		40	v1.12	100388

Progression requirements: Requires 120 credits at Level 4.

Exit qualification: Cert HE Forensic Biology (requires 120 credits at Level 4).

Programme Award and Title: BSc (Hons) Forensic Biology

Year 2/Level 5

Students are required to complete 5 credit bearing core units and 1 option unit

Unit Name	Core/ Option	No of credits		Assessment Element Weightings			Unit version	HECoS Subject Code
			Exam	Cwk	Cwk	hours	no.	
			1	1	2	per unit		
Crime Scene	Core	20	50	50		40	v1.1	101222
Advanced Cell Biology	Core LES	20		50	50	40	v1.1	100822
Biochemistry	Core LES	20		100		40	v1.2	100344
Forensic Law and Practice	Core	20	50	50		40	v1.1	100485/101222
Forensic Science	Core	20	50	50		40	v1.1	100388
Case Studies in Forensic Science	Option	20		50	50	40	v1.1	100388
Biology for Forensic Sciences	Option	20	50	50		40	v1.1	100386
Introduction to Toxicology	Option	20	50	50		40	v1.1	100277
Evolutionary Biology	Option	20	50	50		40	v1.1	100259/100354

Progression requirements: Requires 120 credits at Level 5.

**Exit qualification:** Dip HE Forensic Biology (requires 120 credits at Level 5).

The optional sandwich placement year is taken between Levels 5 and 6.

**Progression requirements:** Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

#### Programme Award and Title: BSc (Hons) Forensic Biology

#### Year 3/4/Level 6

Students are required to complete 3 credit bearing core units and 2 option units

Unit Name	Core/ Optio	No of credit		Assessment Element Weightings		Expected contact	Unit version	HECoS Subject Code
	n	s	Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Advanced Forensic Science	Core	20	50	50		40	v1.1	100388
Independent Research Project (LES)	Core LES	40		100		40	v1.1	100346/ 100410
Advanced Topics in Genetics	Core LES	20	50	50		40	v1.1	100898
Environmental Forensics	Option	20	50	50		40	v1.1	100388
Forensic Toxicology	Option	20	50	50		40	v1.1	100277
Biomolecules	Option LES	20		50	50	40	v1.2	100354
Forensic Entomology	Option	20	50	50		40	v1.1	100388
Pathophysiology	Option LES	20	50	50		40	v1.1	100038

Progression requirements: Requires 120 credits at Level 6.

Exit qualification: BSc (Hons) Forensic Biology (requires 120 credits at Level 6).

# BSC (HONS) FORENSIC INVESTIGATION- PROGRAMME STRUCTURE

Programme Award and Title: BSc (Hons) Forensic Investigation

Year 1/Level 4

Students are required to complete all 6 credit bearing core units

Unit Name	Core/ Option	No of credits				Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Forensic Research Skills	Core LES			30	70	39	v1.0	100388
Cell Biology	Core LES	20	30	70		40	v1.1	100822
Chemistry	Core	20		50	50	40	v1.1	100413
Human Anatomy and Physiology	Core FHSS	20		50	50	40	v1.2	100264
Introduction to Forensic Psychology	Core	20	50	50		40	v1.1	100497
Introduction to Forensic Investigation	Core	20	50	50		40	v1.12	100388

Progression requirements: Requires 120 credits at Level 4.

Exit qualification: Cert HE Forensic Investigation (requires 120 credits at Level 4).

# Programme Award and Title: BSc (Hons) Forensic Investigation

#### Year 2/Level 5

Students are required to complete 5 credit bearing core units and 1 option unit

Unit Name	Core/ Option	No of credits	Assess Weight	ment El	ement	Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Crime Scene	Core	20	50	50		40	v1.1	101222
Advanced Crime Scene	Core	20	50	50		40	v1.1	101222
Forensic Computing	Core	20		100		40	v1.1	100385
Forensic Law and Practice	Core	20	50	50		40	v1.1	100485/101222
Forensic Science	Core	20	50	50		40	v1.1	100388
Case Studies in Forensic Science	Option	20		50	50	40	v1.1	100388
Geographic Information Systems	Option LES	20		50	50	36	v2	100369
Introduction to Toxicology	Option	20	50	50		40	v1.1	100277

**Progression requirements:** Requires 120 credits at Level 5.

**Exit qualification:** Dip HE Forensic Investigation (requires 120 credits at Level 5).

The optional sandwich placement year is taken between Levels 5 and 6.

**Progression requirements:** Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

# Programme Award and Title: BSc Forensic Investigation

# Year 3/4/Level 6

Students are required to complete 3 credit bearing core units and 2 option units

Unit Name	Core/ Option	No of credits	Assess Weight	ment El ings	ement	Expected contact	Unit version	HECoS Subject Code
			Exam	Cwk	Cwk	hours	no.	
			1	1	2	per unit		
Advanced Forensic Science	Core	20	50	50		40	v1.1	100388
Independent Research Project (LES)	Core	40		100		40	v1.1	100346/ 100410
International Investigations	Core	20		50	50	40	v1.2	100823
Environmental Forensics	Option	20	50	50		40	v1.1	100388
Forensic Toxicology	Option	20	50	50		40	v1.1	100277
The Science of Human Remains	Option	20		50	50	40	v1.12	101218
Forensic Practice	Option	20	50	50		40	v1.1	101222
Occupational Health and Safety	Option	20	50	50		40	v1.1	100866

Progression requirements: Requires 120 credits at Level 6.

Exit qualification: BSc (Hons) Forensic Investigation (requires 120 credits at Level 6).

#### BSC (HONS) FORENSIC SCIENCE - PROGRAMME STRUCTURE

Programme Award and Title: BSc (Hons) Forensic Science

#### Year 1/Level 4

Students are required to complete all 6 credit bearing core units

Unit Name	Core/ Option	No of credits	Assess Weight	ment El ings	ement	Expected contact	Unit version	HECoS Subject Code
			Exam	Cwk	Cwk	hours	no.	
Forensic Research Skills	Core LES	20	1	30	<b>2</b> 70	per unit 39	v1.0	100388
Cell Biology	Core LES	20	30	70		40	v1.1	100822
Chemistry	Core	20		50	50	40	v1.1	100413
Human Anatomy and Physiology	Core FHSS	20		50	50	40	v1.2	100264
Introduction to Forensic Psychology	Core	20	50	50		40	v1.1	100497
Introduction to Forensic Investigation	Core	20	50	50		40	v1.1	100388

Progression requirements: Requires 120 credits at Level 4.

Exit qualification: Cert HE Forensic Science (requires 120 credits at Level 4).

# Programme Award and Title: BSc (Hons) Forensic Science

#### Year 2/Level 5

Students are required to complete 5 credit bearing core units and 1 credit bearing option unit.

Unit Name	Core/ Option	No of credits	Assess Weight	ment El	ement	Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Crime Scene	Core	20	50	50		40	v1.1	101222
Advanced Cell Biology	Option	20		50	50	40	v.1.1	100822
Biochemistry	Core LES	20		100		40	v1.2	100344
Forensic Law and Practice	Core	20	50	50		40	v1.1	100485/101222
Forensic Science	Core	20	50	50		40	v1.1	100388
Case Studies in Forensic Science	Option	20		50	50	40	v1.1	100388
Advanced Crime Scene	Option	20	50	50		40	v1.1	101222
Introduction to Toxicology	Core	20	50	50		40	v1.1	100277
Geographic Information Systems	Option LES	20		50	50	36	v2	100369

Progression requirements: Requires 120 credits at Level 5.

Exit qualification: Dip HE Forensic Science (requires 120 credits at Level 5).

The optional sandwich placement year is taken between Levels 5 and 6.

Progression requirements: Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

# Programme Award and Title: BSc (Hons) Forensic Science

#### Year 3/Level 6

Students are required to complete all 3 credit bearing core units (one being double weighted – 40 credits) and 2 credit bearing option units.

Unit Name	Core/ Option	No of credits	Assessn Weightir	nent Elem ngs	ent	Expected contact	Unit version	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2	hours per unit	no.	
Advanced Forensic Science	Core	20	50	50		40	v1.1	100388
Independent Research Project (LES)	Core LES	40		100		40	v1.1	100346/ 100410
The Science of Human Remains	Option	20		50	50	40	v1.12	101218
Environmental Forensics	Option	20	50	50		40	v1.1	100388
Forensic Toxicology	Core	20	50	50		40	v1.1	100277
Biomolecules	Option LES	20		50	50	40	v1.2	100354
Forensic Practice	Option	20	50	50		40	v1.1	100388

Exit qualification: BSc (Hons) Forensic Science (requires 120 credits at Level 6).

# **Post Graduate Programme Profile**

Originating Institution(s):	Place(s) of Delivery: BU	Framework Title (in full): Archaeology, Anthropology & Forensic Science Framework	Mode(s) of study <sup>1</sup> : FT, PT
Faculty of Science & Technology.		Programme Award and Title:  MSc Archaeology	Expected Length of study <sup>2</sup> : FT=1 year PT=2 years
Department of Archaeology, Anthropology & Forensic Science	Programme HESA JACS code: F400	Interim Award and Titles & required credits: PGCert Archaeology (60 level 7 credits), PGDip Archaeology (120 level 7 credits)	BU Credit Structure & ECTS <sup>3</sup> : Level 7 180 credits (90 ECTS credits)

Unit ident	ification					Cost Ce	ntre(s) <sup>4</sup>					Unit Deta	ils		Asses	sment Re	js <sup>7</sup> :	
Unit version no.	Unit n	name		HESA JACS Subjec t Code	CC 1	%	HESA JACS Subject Code	CC2	%	Prog year <sup>5</sup> FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6, PgC, PgD, 7)	Exam		Assessment ment Weight	
	Researd	ch project		F400	112	100				1		С	60	7	- '	100		
		ques of Arc	chaeological Recovery and	V460	126	100				1		С	20	7		100		
		c Archaeo	logy	F400	126	100				1		0	20	7		100		
	Manage	ement of A	rchaeological Material	F420	126	100				1		0	20	7		100		
		e Archaeo		V400	126	100				1		0	20	7		100		
	Principle	es and Me	thods in Human Osteology	L620	111	100				1		0	20	7		100		
			thods in Zooarchaeology	F400	126	100				1		0	20	7		100		
			ce: Skeletal Changes Before and							1						100		
	After De			L620	126	100						0	20	7				
		Evolution		C182	111	100				1		0	20	7		100		
		s Animals		V400	126	100				1		0	20	7		100		
	Marine Plannin		ent Heritage and Spatial	V400	126	100				1		0	20	7		100		
			Archaeology	V400	126	100				1		0	20	7		100		
		ed Zooarc		F400	126	100				1		0	20	7		100		
			uman Remains	L620	126	100				1		0	20	7		100		
		Field Inve	estigation	F400	126	100				1		0	20	7		100		
Effective to Prog Year	from <sup>9</sup> r / Month / `	Year	Contact in faculty: John Gale				Date app June 20			Program no. <sup>11</sup> : v1	ime Spec 1	ification ve	rsion					
Yr. 1	09	2015																
			Name of Professional, Statutory N/A	or Regula	atory Bod	ly (if appr	opriate) <sup>13</sup> :				D	iploma Su	pplement S	Statement re	egarding	PRSB acc	creditation 14	

Originating	Place(s) of Delivery:	Framework Title (in full):	Mode(s) of study 1:
Institution(s):	BU	Archaeology, Anthropology & Forensic Science Framework	FT, PT
BU		Decrease Assert and Titles	Francisco del constitución de structura 2.
Foculty of Colones 8		Programme Award and Title:	Expected Length of study <sup>2</sup> :
Faculty of Science & Technology.		MSc Bioarchaeology	FT=1 year PT= 2year
Department of	Drogramma LIECA	Interim Award and Titles & required credits:	BU Credit Structure & ECTS 3:
Archaeology,	Programme HESA JACS	PGCert Bioarchaeology (60 level 7 credits) PGDip Bioarchaeology (120 level 7 credits)	Level 7 180 credits 990 ECTS credits)
Anthropology & Forensic	code: L620,V400	g, (,	
Science			
:			

Unit ider	ntification					Cost Ce	entre(s) 4					Unit Deta	ails		Assess	sment Regs 7:		
Unit version no.	Uni	t name		HESA JACS Subjec	CC 1	%	HESA JACS Subject	CC2	%	Prog year ⁵ FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6, PgC,			ssment 8 Weightin	gs
no.				t Code			Code							PgD, 7)	Exam 1	CW 1		
	Rese	arch Project		F400	112	100				1		С	60	7		100		
	Huma	an Functiona	al Anatomy	B100	126	100				1		С	20	7		100		
	Princ	iples and Me	ethods in Human Osteology							1		С	20	7		100		
			uman Remains							1		С	20	7		100		
	Mana	agement of A	Archaeological Material	F420	126	100				1		0	20	7		100		
	Princ	iples and Me	ethods in Zooarchaeology	F400	126	100				1		0	20	7		100		
	Tech Reco	•	chaeological Recovery and	V460	126	100				1		0	20	7		100		
	Huma	an Evolution		C182	111	100				1		0	20	7		100		
	Huma	ans, Animals	and Diet	V400	126	100				1		0	20	7		100		
	Marin Plann		ent Heritage and Spatial	V400	126	100				1		0	20	7		100		
Effective Prog Ye			Contact in faculty: Holger Sch	V400   126   100  Contact in faculty: Holger Schutkowski						Program no. <sup>11</sup> : v	nme Spec	ification ve	ersion					
Yr. 1	09	15	Contact in lacuity. Holger Con															
Yr. 2	09	16	Name of Professional, Statuto	ory or Regula	atory Boo	dy (if appr	opriate) 13:					Diploma Su	pplement	Statement re	egarding	PRSB accred	tation 14:	
Yr. 3	09	17	N/A	/A														
Yr.4	09	18	1							1								

Place(s) of Delivery:	Framework Title (in full):	Mode(s) of study <sup>1</sup> :
BU	Archaeology, Anthropology & Forensic Science Framework	FT, PT
	Programme Award and Title:	Expected Length of study 2:
	MSc Biological Anthropology	FT=1 year PT= 2year
Programme HESA		BU Credit Structure & ECTS 3:
JACS		Level 7 180 credits 990 ECTS credits)
code: L620	credits)	
	BU Programme HESA	Archaeology, Anthropology & Forensic Science Framework  Programme Award and Title:  MSc Biological Anthropology  Interim Award and Titles & required credits: PGCert Biological Anthropology (60 level 7 credits), PGDip Biological Anthropology (120 level 7

Unit ider	ntification					Cost Ce	ntre(s) <sup>4</sup>					Unit Deta	ils		Asses	sment Regs	7.	
Unit version	Unit	name		HESA JACS	CC 1	%	HESA JACS	CC2	%	Prog year <sup>5</sup> FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6,			sessment <sup>8</sup> ent Weighti	
no.				Subjec t Code			Subject Code			FI	PI			PgC, PgD, 7)	Exam 1	CW 1		
	Resea	arch Project		F400	112	100				1		С	60	7		100		
	Huma	n Functiona	al Anatomy	B100	126	100				1		С	20	7		100		
	Princi	ples and Me	ethods in Zooarchaeology	L620	126	100				1		С	20	7		100		
	Prima	te Behaviou	r and Ecology	C120	126	100				1		С	20	7		100		
	Huma	n Evolution		C182	111	100				1		С	20	7		100		
	Techr Reco		chaeological Recovery and	V460	126	100				1		0	20	7		100		
2			ethods in Human Osteology	L620	111	100				1		0	20	7		100		
			uman Remains	L620	126	100				1		0	20	7		100		
		s of Evidend	ce: Skeletal Changes Before and	L620	126	100				1		0	20	7		100		
	Huma	ns, Animals	and Diet	V400	126	100				1		0	20	7		100		
Effective Prog Ye	from <sup>9</sup> ar / Month	/ Year	Contact in faculty: Karina Gerda	au-Radonio	_		Date app June 201			Program no. <sup>11</sup> : v	nme Spec	ification ve	ersion					
Yr. 1	09	15	Someof in labarry. Rainla Gorde															
Yr. 2	09	16	Name of Professional, Statutory	or Regula	atory Boo	dy (if appr	opriate) <sup>13</sup> :				D	iploma Su	pplement S	Statement re	egarding	PRSB accre	editation 14:	
Yr. 3	09	17	N/A															
Yr.4	09	18																

Originating Institution(s): BU	Place(s) of Delivery: BU	Framework Title (in full): Applied Sciences Postgraduate Framework	Mode(s) of study <sup>1</sup> : FT, PT
Faculty of Science & Technology.		Programme Award and Title:  MSc Forensic Toxicology by Research	Expected Length of study <sup>2</sup> : FT=1 year PT= 2year
Department of Archaeology, Anthropology & Forensic Science	Programme HESA JACS code:F400, B222	Interim Award and Titles & required credits: PGCert Forensic Toxicology by Research (60 level 7 credits)	BU Credit Structure & ECTS 3: Level 7 180 credits (90 ECTS credits

Unit ide	entificatio	on				Cost Ce	ntre(s) <sup>4</sup>					Unit Deta	nils		Assessm	ent Regs	7.	
Unit version no.		Jnit name		HESA JACS Subjec t Code	CC 1	%	HESA JACS Subject Code	CC2	%	Prog year <sup>5</sup> FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6, PgC, PgD, 7)	Exam (		sessment <sup>8</sup> nt Weightings	
	Ex	ktended Rese	earch Project	F400	112	100				1		С	120	7	1	100		
	Fo	orensic Toxic	ology	B222	112	100				1		C 20 7				100		
	La	aboratory and	poratory and Research Skills			100				1		С	20	7	1	100		
	Pr	ofessional P	ractice in Forensic Science	F410	126	100				1		С	20	7	1	100		
	e from <sup>9</sup> ear / Mor	nth / Year	Contact in faculty: David Osse	lton			Date app June 201			Program no. <sup>11</sup> : v		ification ve	ersion			,		
Yr. 1	09	15																
Yr. 2	09	16	Name of Professional, Statuto						D	iploma Su	pplement \$	Statement r	egarding Pl	RSB accre	editation <sup>14</sup> :			
Yr. 3	09	17	Accreditation has been award	Society of	f Forensic	Science												
Yr.4	09	18	7															ľ

Originating Institution(s): BU	Place(s) of Delivery: BU	Framework Title (in full): Applied Sciences Postgraduate Framework	Mode(s) of study <sup>1</sup> : FT, PT
Faculty of Science & Technology.		Programme Award and Title:  MSc Maritime Archaeology	Expected Length of study <sup>2</sup> : FT=1 year PT= 2year
Department of Archaeology, Anthropology & Forensic Science	Programme HESA JACS code: V400	Interim Award and Titles & required credits: PGCert Maritime Archaeology (60 level 7 credits), PGDip Maritime Archaeology (120 level 7 credits)	BU Credit Structure & ECTS <sup>3</sup> : Level 7 180 credits (90 ECTS credits

Unit ider	ntification					Cost Ce	ntre(s) <sup>4</sup>					Unit Deta	ils		Assess	Assessment Regs 7:			
Unit version no.	Unit	name	HESA JACS Subjec	CC 1	%	HESA JACS Subject	CC2	%	Prog year <sup>5</sup> FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6, PgC,			sessment <sup>8</sup> nt Weightii			
110.				t Code			Code			' '				PgD, 7)	Exam 1	CW 1			
	Rese	arch Proje	ct	F400	112	100				1		С	60	7		100			
	Mana	agement of	f Archaeological Material	F420	126	100				1		С	20	7		100			
	Marit	ime Archa	eology	V400	126	100				1		С	20	7		100			
	Appli	ed Field In	vestigation	F400	126	100				1		С	20	7		100			
	Ancie	ent Ships		V400	126	100				1		С	20	7		100			
		niques Of . Recording	Archaeological Recovery	V460	126	100				1		0	20	7		100			
	Marir Planr		ment, Heritage and Spatial	V400	126	100				1		0	20	7		100			
			ultural Heritage: <i>In Situ</i> and Preservation	V400	126	100				1		0	20	7		100			
	Appli	ed Maritim	e Archaeology	V400	126	100				1		0	20	7		100			
	from <sup>9</sup> ar / Month		Contact in Faculty Paula Palma	-	1	"	Date app June 201			Program no. <sup>11</sup> : v′	me Speci	ification ve	ersion						
Yr. 1	09	15																	
Yr. 2	09	16	Name of Professional, Statuto	ry or Regula	atory Boo	ly (if appr	opriate) 13:				D	iploma Su	pplement S	Statement re	egarding	PRSB accre	ditation 14:		
Yr. 3	09	17	N/A																
Yr.4	09	18																	

Originating Institution(s): BU	Place(s) of Delivery: BU	Framework Title (in full): Applied Sciences Postgraduate Framework	Mode(s) of study <sup>1</sup> : FT, PT
Faculty of Science & Technology.		Programme Award and Title:  MSc Forensic Anthropology	Expected Length of study <sup>2</sup> : FT=1 year PT= 2year
Department of Archaeology, Anthropology & Forensic Science	Programme HESA JACS code:F400, L620	Interim Award and Titles & required credits: PGCert Forensic Anthropology (60 level 7 credits), PGDip Forensic Anthropology (120 level 7 credits)	BU Credit Structure & ECTS 3: Level 7 180 credits (90 ECTS credits

Unit ide	ntification					Cost Ce	ntre(s) 4					Unit Deta	ils	Asses	Assessment Regs 7:			
Unit version	Un	Unit name			CC 1	%	JACS	CC2	%	Prog year <sup>5</sup> FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6,	Assessment <sup>8</sup> Element Weightings			
no.				Subjec t Code			Subject Code			FI	FI			PgC, PgD, 7)	Exam 1	CW 1		
	Res	earch Proje	ect	F400	112	100				1		С	60	7		100		
	Hum	an Function	onal Anatomy	B100	126	100				1		С	20	7		100		
2	Princ	ciples and	Methods in Human Osteology	L620	111	100				1		С	20	7		100		
		es of Evidence and After	ence: Skeletal Changes er Death	L620	126	100				1		С	20	7		100		
	Crim Scie		Management and Forensic	F410	112	100				1		С	20	7		100		
	Prof	essional P	ractice in Forensic Science	F410	126	100				1		С	20	7		100		
	Fore	nsic Archa	eology	F400	126	100				1		0	20	7		100		
		nniques of ording	Archaeological Recovery and	V460	126	100				1		0	20	7		100		
Effective Prog Ye		<u> </u>	Contact in Faculty Martin Smith				Date app June 201			Program no. <sup>11</sup> : V	nme Spec '1	ification ve	ersion					
Yr. 1	09	15																
Yr. 2	09	16		Name of Professional, Statutory or Regulatory Body (if a							D	iploma Su	pplement S	Statement r	egarding	PRSB accre	ditation 14:	
Yr. 3	09	17	Accreditation has been awarded	d by the Cl	nartered	Society o	f Forensic	Science										
Yr.4	09	18																

Originating Institution(s): BU	Place(s) of Delivery: BU	Framework Title (in full): Applied Sciences Postgraduate Framework	Mode(s) of study <sup>1</sup> : FT, PT
Faculty of Science & Technology.		Programme Award and Title:  MSc Osteoarchaeology	Expected Length of study <sup>2</sup> : FT=1 year PT= 2year
Department of Archaeology, Anthropology & Forensic Science	Programme HESA JACS code:L620, V400	Interim Award and Titles & required credits: PGCert Osteoarchaeology (60 level 7 credits), PGDip Osteoarchaeology (120 level 7 credits)	BU Credit Structure & ECTS 3: Level 7 180 credits (90 ECTS credits

Unit ide	ntification	1				Cost Ce	ntre(s) <sup>4</sup>			Unit Details						Assessment Regs 7:				
Unit version no.	Un	nit name		HESA JACS Subjec	CC 1	%	HESA JACS Subject	CC2	%	Prog year <sup>5</sup> FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6, PgC,	Assessment <sup>8</sup> Element Weightings					
110.				t Code			Code			l''				PgD, 7)	Exam 1	CW 1				
	Res	search Proje	ct	F400	112	100				1		С	60	7		100				
2	Prin	nciples and N	Methods in Human Osteology	L620	111	100				1		С	20	7		100				
	Prin	nciples and N	Methods in Zooarchaeology	F400	126	100				1		С	20	7		100				
	Adv	anced Zooa	rchaeology	F400	126	100				1		С	20	7		100				
	Hun	nan Animals	V400	126	100				1		С	20	7		100					
	Hun	Human Functional Anatomy		B100	126	100				1		0	20	7		100				
		chniques of <i>F</i> cording	Archaeological Recovery and	V460	126	100				1		0	20	7		100				
	Arcl	haeology of	Human Remains	L620	126	100				1		0	20	7		100				
	Bod		nce: Skeletal Changes	L620	126	100				1		0	20	7		100				
	Effective from <sup>9</sup>						Date app			Program	nme Spec	ification ve	ersion							
Yr. 1	ar / Montl	15	Contact in Faculty: Ellen Hamble	eton			June 201	5		110. **: V	' I									
Yr. 2	09	16	Name of Professional, Statutory	or Regula	atory Boo	ly (if appr	opriate) <sup>13</sup> :				D	iploma Su	pplement S	Statement r	egarding	PRSB accre	ditation <sup>14</sup> :			
Yr. 3	09	17	N/A																	
Yr.4	09	18	1																	

Originating Institution(s): BU	Place(s) of Delivery: BU	Framework Title (in full): Applied Sciences Postgraduate Framework	Mode(s) of study <sup>1</sup> : FT, PT
Faculty of Science & Technology. Department of		Programme Award and Title:  MSc Forensic Archaeology	Expected Length of study <sup>2</sup> : FT=1 year PT= 2year
Archaeology, Anthropology & Forensic Science	Programme HESA JACS code: F400	Interim Award and Titles & required credits: PGCert Forensic Archaeology (60 level 7 credits), PGDip Forensic Archaeology (120 level 7 credits)	BU Credit Structure & ECTS <sup>3</sup> : Level 7 180 credits (90 ECTS credits

Unit ider	ntification					Cost Co	entre(s) <sup>4</sup>					Unit Deta	Assessment Regs 7:					
Unit version	Unit	t name	HESA JACS	CC 1	%	JACS	CC2	%	Prog year <sup>5</sup> FT	Prog year <sup>5</sup> PT	Core / option	No of credits <sup>6</sup>	Level (4,5,6,	E	Assessmen lement Weigh			
no.				Subject Code			Subject Code				PI			PgC, PgD, 7)	Exam 1	CW 1		
	Rese	earch Proje	ect	F400	126	100				1		С	60	7		100		
	Fore	nsic Archa	eology	F400	126	100				1		С	20	7		100		
	Scier	nce of Hun	nan Remains	L620	126	100				1		С	20	7		100		
	l l	niques of a	Archaeological Recovery and	V460	126	100				1		С	20	7		100		
			ensic Archaeology	F400	126	100				1		С	20	7		100		
	Profe	essional Pr	ractice in Forensic Science	F410	126	100				1		С	20	7		100		
	Crimo Scier		lanagement and Forensic	F410	112	100				1		С	20	7		100		
Effective Prog Yea			Contact in Faculty Paul Cheath	am	-		Date appl June 201			Progran	Programme Specification version no. 11: v1							
Yr. 1	09	15																
Yr. 2	09	16	Name of Professional, Statutory						Diploma	Diploma Supplement Statement regarding PRSB accreditation 14:								
Yr. 3	09	17	Accreditation has been awarde	Accreditation has been awarded by the Chartered Society of														
Yr.4	09	18																