# MSc Professional Human Osteoarchaeology - Module Summaries

# **ARMMSA: Musculo-Skeletal Anatomy**

This module instructs you on the musculoskeletal system, dental anatomy, skeletal development, and how the action of the soft tissues (muscle, tendons and ligaments) produce the characteristic morphology of individual bones. You will gain comprehensive knowledge to enable you to accurately identify complete and fragmentary adult and child skeletal remains from archaeological contexts and become familiar with anatomical terms and names of structures. This detailed knowledge of the human skeleton builds up over the module with regular marked assessments and feedback sessions.

#### Aims:

This module provides you with an understanding of the bodies systems, their functions and how they impact the growth, development and remodelling of the human skeleton. You will learn to use anatomical terminology with confidence and develop a comprehensive understanding of the language used to describe features on the child and adult skeleton. Through this familiarity you will be able to identify even fragmentary remains from archaeological sites.

Assessment: Short Essays; Anatomy Tests

#### **ARMAHR: Analysis of Human Remains**

This highly practical module provides the essential methods and skills required for the study of human skeletal remains from archaeological contexts. You will apply the most recent approaches used to assess sex, age, stature, handedness, ancestry, and parity in adult skeletal remains, as well as learn a broad range of metrical and non-metrical measures in both adults and children. The specific techniques required to analyse non-adult human remains will be explored. The history, development and limitations of each method will be outlined through a series of lectures and reinforced during the practical class.

## Aims:

This module will provide you with the professional techniques you require to practice human osteology for both commercial units and during primary research.

Assessment: Professional Skeletal Report; Essay

# ARMEPP: In at the Deep End: Practicing Osteoarchaeology

This unique module prepares you for work within modern archaeology. Growing numbers of infrastructure projects, housing developments, mineral extraction and church re-ordering projects, require large teams of professional osteologists. This module explores the legal, ethical and health and safety aspects of working as a professional. It takes a 'forensic' style approach to the understanding how to excavate human skeletal remains, supervise cemetery excavations and make quick decisions about excavation and sampling strategies. You will be introduced to the roles of other professionals working on-site, how to communicate with clients, and to make well-reasoned recommendations to those in the commercial, academic and heritage sectors. You will meet a variety of specialists working in Museums, Units, and Government agencies through guest lectures and site visits. The module ends with a mock burial excavation.

#### Aims:

This module prepares you for the reality of working on a modern archaeological site as a professional osteoarchaeologist. It explores the skills required to manage large excavations, watching briefs and working with 'clients'. It also explores other job roles including working for museums as educators and curators of human remains.

Assessment: Written Scheme of Investigation, Project Pitch, Excavation Recording Form

## **ARMIDB: Issues and Debates in Bioarchaeology**

This module provides graduate students with a conceptual understanding of human burial archaeology that enables them to evaluate the nature of the evidence used in the discipline, to critically assess methodologies and evaluate their appropriateness for different research questions.

#### Aims:

This module provides you with a deeper understanding of the approaches used to analyse human skeletal remains from different archaeological contexts, and a critical awareness of central issues within burial archaeology that can be applied to both the optional modules and the dissertation.

Assessment: Critique; Oral Presentation

# **Preparing for Independent Research**

This module prepares you for a sustained period of independent research required for completion of your dissertation. Sessions cover research ethics, dissertation critiques and marking criteria, statistical approaches, and conference presentations. The module also covers life beyond a degree, including applying for a PhD. The module ends with a Dissertation Conference where you will present your Research Proposal. This module will provide you with the skills required to carry out a successful independent research project and written dissertation.

Assessment: Research Proposal, Oral Presentation

### **ARMPAC: Paleopathology of Adults and Children**

Palaeopathology is the study of the history of disease using primary information from human skeletal remains and secondary sources such as archaeological, ethnographical, artistic, iconographic, documentary and clinical data. It takes a multidisciplinary (biocultural) approach linking the biological evidence for disease with cultural contextual data. This module provides you with the critical skills required to recognise healed and active pathological conditions and interpret their significance in the contexts of key theoretical paradigms. Uniquely, this module has particular focus on the growing field of child palaeopathology.

#### Aims:

An analysis of trauma and disease within a skeletal sample is a critical element of any archaeological cemetery investigation and this module provides critical skills needed for human osteologists to fully interpret the skeletal data. You will learn to identify and address key archaeological questions for inclusion in specialist reports and for primary research

projects. The module covers a variety of conditions and how they are differently expressed in adult and child remains. The focus on child skeletal remains is a unique aspect of this module.

**Assessment:** Palaeopathological Description Exercise; Essay

# ARMSTD: Science and the Dead: the taphonomy and chemistry of human remains

Understanding of taphonomy and knowledge of biomolecular methods which are now being routinely applied in burial archaeology are essential for any archaeologist specialising in the study of human remains. This is designed to provide you with an understanding of the key biomolecular methods that are currently employed by modern archaeology to reconstruct the living from the dead.

#### Aims:

Focussing on principles rather than technical detail, this module provides an understanding of human taphonomy, to introduce the most widely used methods in the scientific analysis of human remains (isotopes, elemental analysis and DNA) and to convey an understanding of the advantages and drawbacks of each approach to non-scientists. The module also aims to provide you with an understanding of the principles of statistical analysis of isotope data.

**Assessment:** Essay; Specialist Report; Oral Presentation

# **ARMRPP: Research Project**

You will develop key academic research skills and advanced critical evaluation and understanding of current research problems, and method and theory, and in designing, planning and implementing a major independent research project, through writing a dissertation of 20,000 words.

**Assessment:** Dissertation

Modules subject to change