

Liverpool John Moores University

Title: HUMAN IDENTIFICATION AND FORENSIC DNA
Status: Definitive
Code: **7106NATSCI** (123677)
Version Start Date: 01-08-2021

Owning School/Faculty: Biological and Environmental Sciences
Teaching School/Faculty: Biological and Environmental Sciences

Team	Leader
Matteo Borrini	Y
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Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 40
Total Learning Hours: 200 **Private Study:** 160

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12
Practical	10
Seminar	10
Workshop	8

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Presentation	or. pres.	Series of oral presentations	60	
Portfolio	portf	Genetics portfolio	40	

Aims

The students comprehensively analyse the problems related to the identification of an unknown subject from both skeletal and genetic features. The module provides an in-depth critical understanding of the techniques and the methodology involved in the skeletal identification of human remains in the field of Forensic Anthropology. The aim of this module is also to introduce the students in the use of a DNA typing approach for the identification of human remains.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically evaluate methods for sex determination from human skeletal materials
- 2 Critically evaluate methods for age estimation from human skeletal materials
- 3 Critically evaluate methods for ancestry estimation from human skeletal materials
- 4 Explain and critically evaluate the principles of DNA identification, their advantages and their limitations.
- 5 Effectively present the results of DNA analysis in the form of a professional report.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Oral presentation	1	2	3
Genetics portfolio	4	5	

Outline Syllabus

- *sex estimation from cranium and pelvis, both complete and fragmentary*
- *age estimation in adults and juveniles, both from complete and fragmentary materials*
- *ancestry estimation*
- *genetic identification*

Learning Activities

In addition to lectures, the students will be involved in seminars where they will read and discuss recent papers related to the main topics of the programme. Practical sessions and workshops will be provided to practise and test the skills learned during the module

Notes

The students will comprehensively analyse different techniques for the evaluation of a biological profile from human skeletal remains. Students completing the module will demonstrate a critical understanding of both genetic and skeletal method for human identification.

