

## Liverpool John Moores University

Title: HUMAN VARIATION AND IDENTIFICATION  
Status: Definitive  
Code: **5007NATSCI** (112584)  
Version Start Date: 01-08-2016

Owning School/Faculty: Natural Sciences & Psychology  
Teaching School/Faculty: Natural Sciences & Psychology

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**Academic Level:** FHEQ5      **Credit Value:** 24      **Total Delivered Hours:** 56  
**Total Learning Hours:** 240      **Private Study:** 184

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	28
Practical	25
Workshop	3

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	interp	Timed interpretative question	40	
Report	Prac 1	Assessed Practical	30	
Report	Prac 2	Assessed Practical	30	

## Aims

*To examine the causes and extent of genetic and phenotypic variation in modern human populations. To examine the methods used to reconstruct life patterns and individual identification from skeletal remains.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Analyse and interpret the data from selected traditional and molecular techniques used to investigate patterns of human variation.
- 2 Discuss the possible contributions made by adaptation and acclimatisation to the morphological differences observed within and between human populations.
- 3 Critically evaluate the use of genetic techniques in determining relatedness.
- 4 Know methods used to estimate the sex, age-at-death, body size & shape parameters and the geographic provenance of an individual from human skeletal remains.
- 5 Critically evaluate the methods by which humans remains are identified.

## Learning Outcomes of Assessments

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

timed interpretative question	1	2	3	4	5
Online practical assessment 1	1	2	3		
Online practical assessment 2	4	5			

## Outline Syllabus

*Historical perspectives on human variation. The human genome and genetic variation in human populations. Patterns of genetic and morphological variation in modern human populations. The adaptive significance of human variation. Historical perspective on forensic anthropology. The recovery of human remains. The effects of exposure, burial, and taphonomic processes. Estimation of sex, age-at-death, body size & shape parameters from human skeletal remains. Recognition of trauma and diagnosis of palaeopathologies of human skeletal remains. Identification of human remains. Methodologies used for individual remains versus those used for cemeteries.*

## Learning Activities

The module is delivered using lectures and practicals.

## **Notes**

This module examines the patterns of genetic and morphological variation in modern human populations and how the techniques used in such studies can provide clues about the origins, dispersal and movements of human populations. This module also examines the methods used to identify human remains, as well as critically assess the accuracy of these different methods.