Dental Anthropology

Module Information

2022.01, Approved

Summary Information

Module Code	7104NATSCI
Formal Module Title	Dental Anthropology
Owning School	Biological and Environmental Sciences
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Biological and Environmental Sciences

Learning Methods

Learning Method Type	Hours
Lecture	18
Practical	3
Seminar	4
Workshop	15

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	The aims of this module are to provide students with the theoretical knowledge and practical experience required by a bioarchaeologist or forensic anthropologist to identify and examine human teeth, and to use them to characterise and compare both samples and individuals. In addition, the ability to discuss, appraise and assess the results is obtained.This course deals with a wide range of dental anthropological topics. Students will study actual human teeth and dental casts (of themselves and others), and learn about dental anatomy, metrics, morphology, pathology, forensics, embryology, teeth and behaviour (including use), genetics, evolution, affinity assessment, and a variety of bioarchaeological and quantitative applications.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Fully comprehend and discuss the history and various perspectives of dental anthropological study as a sub-field of biological anthropology and forensic anthropology.
MLO2	2	Definitively identify deciduous and permanent human teeth (i.e., a forensic and/or bioarchaeological context).
MLO3	3	Demonstrate a thorough knowledge of various analytical and quantitative methods for assessing individual life history from teeth (e.g., diet, health, cultural factors, ethnic affinity, age, sex, etc.).
MLO4	4	Demonstrate a thorough knowledge of various analytical and quantitative methods for assessing population history from samples of dentitions (e.g., diet, health, disease, cultural factors, biological affinity).

Module Content

Outline Syllabus	• Introduction.• Background: Theoretical issues, rationale, goals and objectives, applications.• History of Dental Anthropology: The early researchers. The Human Dentition: Terms of orientation, tooth structure, tooth classes.• The Human Dentition: The masticatory system, occlusion. Identifying Human Teeth: Side, upper/lower, position, landmarks, etc.• Dental Casting of Class. • Dental Metric Variation: Measurements, indices, techniques, univariate statistical. • More Dental Metric Variation: Multivariate methods; Past and recent populations. • Dental Morphological Variation: Traits.; Recording, statistical methods.• More Dental Morphology: Past and recent populations. Growth and Development: Embryology, eruption, fields, drift, symmetry. • Dental Microstructure. Teeth and Behaviour: Use, wear, diet, modification, beauty, psychology, folklore. • More Teeth and Behaviour. Oral Pathology: Caries, periodontal disease, fluorosis, developmental anomalies (e.g., LEH), and many others. • Forensic Applications: Teeth and Traits in Individuals: sex, age, “race” ID. • Dental Evolution: Origins of teeth, major adaptations, cusp/crown form, palaeontology
Module Overview	This module provides advanced training in the identification of teeth and deals with a wide range of dental anthropological topics. It aims to provide you with the theoretical knowledge and practical experience required by a Bioarchaeologist or Forensic Anthropologist to identify and examine human teeth, and to use them to characterise and compare both samples and individuals.
Additional Information	This module provides advanced training in the identification of teeth. It will also cover topics that will allow the student to determine origins, phylogenetic affinities, diet, and many other facets of life experience and population structure from human and primate teeth.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Practice	Dentition Practical	40	0	MLO2, MLO3, MLO4

Centralised Exam	Project Report	60	0	MLO1, MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Joel Irish	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings