

**Human Osteoarchaeology: Anthropological Analysis  
of Social Groups**

Code: 44480  
ECTS Credits: 6

| Degree                          | Type | Year | Semester |
|---------------------------------|------|------|----------|
| 4317545 Prehistoric Archaeology | OT   | 0    | 1        |

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

## Contact

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## Use of Languages

Principal working language: spanish (spa)

## Teachers

Camila Oliart Caravatti

## External teachers

Joana Caterina Araujo Bruno

## Prerequisites

None.

## Objectives and Contextualisation

The main goal of the course is to provide students with a qualified formation on the study of human skeletal remains from archaeological excavations. The four core areas under will be:

- taphonomy of funerary practices
- biological descent and kinship
- paleopathology
- violence markers and forensic applications

Given that the course has a marked hands-on character and applied knowledge perspective, the syllabus includes many case studies on all topics and a constant use of anatomic models and the whole reference collection curated by the Human Bioarchaeology Laboratory.

## Competences

- Analyse and extract significant scientific information from archaeological materials and from the results of specialist scientific studies.

- Combine findings from different programmes of specialist analysis, identifying any contradictions and drawing conclusions
- Critically analyse a scientific problem area on the basis of specific evidence and documents.
- Develop original contributions within the framework of theoretical research and practical applications.
- Recognise and judge the social consequences of your own work, taking diversity in gender, identity and culture into account.
- Recognise present-day challenges in the study of prehistoric archaeology.
- Show rigour, responsibility and quality in research and dissemination work.
- That students have the learning skills that enable them to continue studying in a way that will be largely self-directed or autonomous.
- That the students can apply their knowledge and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.
- Work both individually and in multidisciplinary teams

## Learning Outcomes

1. Apply the theoretical knowledge acquired and solve problems in new environments within osteoarchaeological analysis.
2. Critically apply research techniques in human osteology.
3. Critically assess the value of the different tools needed for research in archaeobotany.
4. Demonstrate the ability to integrate into a team with specialists from other disciplines.
5. Evaluate the real potential for influencing the public through cultural action.
6. Implement protocols for conducting field work and osteoarchaeological sample collection.
7. Include gender perspectives, universal accessibility and multiculturalism when proposing and reflecting on work.
8. Incorporate ethical considerations into the analysis of the cultural needs of different groups.
9. Organise, plan and manage research work in osteology.
10. Organise, plan and manage research work.
11. That students have the learning skills that enable them to continue studying in a way that will be largely self-directed or autonomous.
12. That the students can apply their knowledge and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.

## Content

### SECTION 1. Human osteology: bone identification and the basis of bioarchaeology and osteobiography

- Introduction. Anatomy, osteology and bioarchaeology.

- Human skeleton I: the cranial vault. Bones, landmarks sutures and skull morphology. Ossification centres and suture closure. Sexual dimorphism. Craniometrics. Epigenetic traits. Identification practices. Sex and age assessment.

- Human skeleton II: dentition. Teeth anatomy & recording. Formation and eruption processes. Identification practices. Age assessment.

- Human skeleton III: trunk. Spine, thoracic cage and bones of the scapular & pelvic girdle. Ontogeny and sex markers. Identification practices. Sex and age assessment.

- Human skeleton IV: limbs. Bones of the upper and lower limbs. Epiphyseal closure and diaphyseal metrics. Identification practices. Anthropometry. Stature assessment.

- Human remains identifications and recording. Hands-on sessions.

### SECTION 2. Applications

- Archaeothanatology. Osteological implications of funerary practices and burial systems. Taphonomic agents. Cadaveric and skeleton processes. Primary, secondary, simultaneous and multiple inhumations. Body treatment and funerary ritual. Case studies.

- Biological descent and kinship. Basics on paleogenetics and archaeogenetics. Mitochondrial and nuclear DNA. Biological distance and genetic ancestry in the study of kinship, residence and migrations. Case studies.

- Paleopathology. Anomalies and bone markers. Differential diagnosis. Congenital, metabolic and infectious syndromes. Postural and workload markers. Traumatic injuries and violence. Case studies and identification practices.

- Crimes against humanity and forensic applications. Research on Francoist repression mass graves. Discussion on problems and limitations of victim identification by means of case studies. Forensic facial approximation applications and techniques. Introduction to 3D digital modelling.

## Methodology

### Classroom activities

- Introduction sessions on theory and methods
- Collaboration of specialists in seminars and debates
- Hands-on sessions with full use of anatomical models and the reference collections curated by the Human Bioarchaeology Laboratory
- Online practicing and solution of case studies

### Guided activities

- Guidance on learning exercises (individual & in small groups)
- Problem-oriented learning

### Individual activities

- Information search, reading, exercises (Moodle), study

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Activities

| Title                                                          | Hours | ECTS | Learning Outcomes  |
|----------------------------------------------------------------|-------|------|--------------------|
| Type: Directed                                                 |       |      |                    |
| Lectures & seminars and hands-on sessions (practical training) | 37.5  | 1.5  | 2, 4, 10, 12, 11   |
| Type: Supervised                                               |       |      |                    |
| Guidance                                                       | 37.5  | 1.5  | 8, 7, 9, 1, 5      |
| Type: Autonomous                                               |       |      |                    |
| Test preparation and essay writing                             | 65    | 2.6  | 2, 6, 3, 12, 11, 1 |

## Assessment

Filling in the data sheets of practical exercises 60%

Individual and group work (exercises and tests) 30%

Class attendance and active participation 10%

## Assessment Activities

| Title                           | Weighting | Hours | ECTS | Learning Outcomes                 |
|---------------------------------|-----------|-------|------|-----------------------------------|
| Classroom & lab practices       | 60%       | 6     | 0.24 | 2, 8, 6, 3, 4, 7, 9, 10, 12, 1, 5 |
| Personal and collaborative work | 40%       | 4     | 0.16 | 2, 6, 7, 9, 12, 11, 1             |

## Bibliography

### SECTION 1

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### SECTION 2

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GELLER, P. (2017), *The bioarchaeology of socio-sexual lives. Queering common sense about sex, gender and sexuality*. Springer, Nova York.

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WALDRON, T. (2009), *Palaeopathology*. Cambridge University Press, Cambridge.

## **Software**

Word, Power Point, Teams, PDF reader