

Degree programme	Type	Course
Prehistoric Archaeology	OP	1

Contact lecturer

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Teaching staff

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Group languages

You can consult this information at the [end](#) of the document.

Prerequisites

There are no prerequisites although a basic knowledge of bioarchaeology is recommended.

Objectives

General

Presentation and practical application of the methodological aspects involved in archaeozoological analysis, with special emphasis on the most innovative techniques. The main analytical approaches and the different categories and units used in the quantitative and qualitative analysis of archaeological faunal remains of prehistoric chronology will be discussed. The course will also focus on those aspects of an interpretative nature that may be useful when making inferences about the dynamics of prehistoric societies. The aim is for students to acquire the competence to study this category of archaeological remains and/or to correctly manage their study. Problems such as the classification of faunal remains and the characterisation of the variability of sets of faunal remains based on different analytical procedures, archaeotaphonomy, biomechanical studies and bone microstructure will be addressed. Emphasis will be placed on the identification of changes in the shape and

size of animals, characterisation, production and exploitation of prehistoric herds, butchery and culinary methods and techniques, and identification and characterisation of the first domestic animals.

Specific

- To present and discuss theoretical approaches to archaeozoological analysis.
- To acquire experience in the direct analysis of archaeological faunal remains.
- Acquire experience in working with archaeozoological databases, quantification and statistics, and three-dimensional recording of archaeological faunal remains.
- Formulate and evaluate hypotheses and research questions on assemblages of archaeological faunal remains.
- Assess the interpretative potential of archaeozoological data
- Develop competence in archaeological research methods.

Learning outcomes

1. 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.
2. That students have the learning skills that enable them to continue studying in a way that will be largely self-directed or autonomous.
3. Knowledge and understanding that provide a basis or opportunity for originality in developing and / or applying ideas, often in a research context.
4. Demonstrate the ability to integrate into a team with specialists from other disciplines.
5. Critically assess the value of the different tools needed for research.
6. Application of methods from geology, geomorphology, experimental archaeology, and ethnoarchaeology in the field of research in prehistoric archaeology.
7. Critically evaluate the suitability of the different instrumental tools necessary for the investigation of lithic materials in Prehistoric Archaeology.
8. Implement protocols for conducting field work and faunal sample collection.
9. Organise and plan research work on faunal remains.
10. Apply the theoretical knowledge acquired and solve zooarchaeological problems in new environments.
11. Present and justify conclusions from zooarchaeological analysis clearly and unambiguously.
12. Implement protocols for conducting field work and zooarchaeological sample collection.

Contents

The course is divided into four interrelated thematic areas. Each axis integrates the most advanced analytical methods and the historical issues that guide the main current debates in archaeology. It will focus on topics such as animal domestication, biodiversity and sustainable management of the environment, differential access to resources and the social and political mechanisms of production control. The course will combine theoretical and practical sessions in the laboratory with archaeological materials.

1) Biodiversity, climate and environment

- Groups of animals and their biological and archaeological resolution.
- Taxonomy and identification principles
- Age and sex determination
- Seasonal indicators
- Dental microwear analysis
- Archaeotaphonomy and diagenesis of bones

2) Skeletons in movement: from the bone microstructure to the animal use

- Animal skeleton, bone structure and development
- Dental development and bone fusion
- Biometric analysis and geometric morphometrics
- Biomechanics and bone microstructure
- Bone paleopathology

3) Animals and human nutrition

- Age histograms and animal productions
- Traces and fractures as evidences of animal processing
- Food cooking techniques
- Thermoalterations and spectroscopic analysis of bones

4) Ecology, society and politics of animal management in Prehistory

- Community and ecological impact of early animal husbandry
- Animal management and political discourse
- Gender dimensions in animal management
- Symbolic and ideological aspects in society-animal interactions.

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Initial theoretical introductions	5	0.2	3, 5, 6, 7, 9
Mentoring	14	0.56	1, 2, 4, 5, 6, 9, 11
Specialized seminars	6	0.24	4, 5, 6, 7, 9
Training with archaeological faunal remains	25	1	1, 2, 6, 8, 10, 12
Independent study	50	2	1, 5, 6, 8, 9, 10, 11, 12
Problem-based learning	10	0.4	1, 2, 3, 5, 9, 10

This course is eminently practical, with initial theoretical introductions and specialised seminars. During the course students will work with a variety of faunal assemblages. It is a cross-cutting module, integrating knowledge from related fields such as biology, veterinary science, chemistry and geology.

Seminars:

- 1) Dr. Roger Alcantara Fors, postdoctoral researcher (UAB): Dental microwear and mesowear: methods and

applications in archaeology.

2) Dr. Lúdia Colominas, senior researcher (ICAC, Tarragona): Geometric morphometrics in archaeozoology: concepts, methods and applications.

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.

Assessment

Continuous assessment activities

Title	Weight	Hours	ECTS	Learning outcomes
Practical training	40%	20	0.8	6, 7, 8, 9, 10, 12
Participation in debates and oral defense of studies	10%	5	0.2	1, 3, 4, 5, 6, 11
Report on practical sessions and individual work	50%	15	0.6	1, 2, 4, 6, 7, 8, 10, 12

This subject does not allow a single assessment.

Exchange students who request to bring forward an examination date must submit to the lecturer a written document from their home university justifying their request.

Activities included in continuous evaluation:

- Participation in and follow-up of practical sessions focused on solving specific case studies.
- Completion and submission of the practical report and individual research assignment.
- Oral presentation and discussion of the results.

On carrying out each evaluation activity, lecturers will inform students (on Moodle) of the procedures to be followed for reviewing all grades awarded, and the date on which such a review will take place.

Conditions applicable to the evaluation process:

- Students will obtain a not assessed/not submitted course grade unless they have submitted more than 30 % of the assessment items.
- In the event of a student committing any irregularity that may lead to a significant variation in the grade awarded to an assessment activity, the student will be given a zero for this activity, regardless of any disciplinary process that may take place. In the event of several irregularities in assessment activities of the same subject, the student will be given a zero as the final grade for this subject.
- This course allows the use of Artificial Intelligence (AI) technologies exclusively for bibliographic searches and text correction tasks. Students must: (i) identify the sections that have been generated using AI; (ii) specify the tools used; and (iii) include a critical reflection on how these tools have influenced the process and the final outcome of the activity. Lack of transparency regarding the use of AI in the assessed activity will be considered academic dishonesty; the corresponding grade may be lowered, or the work may even be awarded a zero.

Re-evaluation:

Students who have not passed the initial evaluation may be eligible for re-evaluation, provided that they have completed assessment activities accounting for at least 2/3 of the final grade.

Bibliography

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Software

The geometric morphometrics seminar will be conducted using specific software provided by the teaching team.

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE

Type of teaching	Group	Language	Semester	Shift
(TEm) Theory (master)	1	Catalan/Spanish	first semester	afternoon