

## Human Origins

Code: 100749  
ECTS Credits: 3

**2025/2026**

Degree	Type	Year
Biology	OT	4
Science, Technology and Humanities	OT	4

## Contact

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## Teachers

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## Teaching groups languages

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

## Prerequisites

There are no prerequisites to follow the course successfully

## Objectives and Contextualisation

The main objective of the subject of human origins is to understand current human groups based on their evolution over time.

The study of the evolution of man is made from an integrative perspective of various disciplines. The entire process can not be understood without understanding the periodization and therefore the dating methods for each moment; The changes can not be understood without understanding the evolution of the Earth and how it limits the environment, as climate changes modify ecosystems; tool manufacturing and brain development ...

In this whole, we can understand the evolution from the first primates to the variability of the current man.

Throughout this process, we can understand the evolution of diseases and their distribution in the biosphere.

And the molecular study of the different hominins will capture the variability of the current man.

## Competences

### Biology

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Analyse and interpret the origin, evolution, diversity and behaviour of living beings.
- Assess environmental impacts.
- Be able to analyse and synthesise
- Be able to organise and plan.
- Characterise, manage, conserve and restore populations, communities and ecosystems.
- Control processes and provide services related to biology.
- Design and carry out biodiagnoses and identify and use bioindicators.
- Develop a historical vision of biology.
- Isolate, identify and analyse material of biological origin.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Perform genetic analyses.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.

### Science, Technology and Humanities

- Produce written papers and give effective oral presentations, adopting the appropriate register in different languages.

## Learning Outcomes

1. Analyse a situation and identify its points for improvement.
2. Analyse present and past intra-population and inter-population variability in our species.
3. Analyse the mechanisms that generate biological diversity in our species and interpret their adaptive significance and the mechanisms that maintain this diversity.
4. Analyse the sex- or gender-based inequalities and the gender biases present in one's own area of knowledge.
5. Analyse the sustainability indicators of the academic and professional activities within the area, integrating the social, economic and environmental dimensions.
6. Assess environmental impacts.
7. Be able to analyse and synthesise.
8. Be able to organise and plan.
9. Critically analyse the principles, values and procedures that govern the exercise of the profession.
10. Define the role of the primates in the identification of disease-causing agents.
11. Detect problems associated with population changes and design alternatives.
12. Develop critical thinking and reasoning and communicate ideas effectively, both in the mother tongue and in other languages.
13. Explain the historical precedents that justify the study of the human being as a separate subject area.
14. Explain the underlying biological causes of human social behaviour.
15. Identify the principal natural factors that have intervened in the distribution of human populations.

16. Interact with and advise government institutions operating in the field of social policy and population and public health policy.
17. Interpret human variability as a source of individualisation.
18. Interpret phylogeographic analyses of the human species.
19. Interpret the evolutionary dimension of hominids and their evolution in space and in time.
20. Interpret values of human demography and epidemiology.
21. Interrelate the environmental, biological and cultural data that merge in the interpretation of human evolution.
22. Make population genetic determinations from which to interpret the relationships between normal and pathological variability in the human species, and interpret the findings.
23. Manipulate human samples and perform morphological, molecular and chromosome determinations for the diagnosis and prevention of diseases.
24. Propose new methods or well-founded alternative solutions.
25. Propose ways to evaluate projects and actions for improving sustainability.
26. Recognise the anomalies of human chromosomes and assess their consequences.
27. Select and classify museum samples and recover data from archives and registries.
28. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
29. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
30. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
31. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
32. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
33. Summarise and interpret the biology, evolution and behaviour of the order Primates.

## Content

- Review and Update: Phylogeny and Concepts
- Before 2 million years ago
- Erectus grade (Out of Africa, chronospecies, genetic evidence, and extinction)
- The Hobbits (Homo floresiensis and Homo luzonensis)
- Denisovans (fossils, hybridization, and expansion)
- Neanderthals, new evidence of hybridization (sapiens and Denisovans), and extinction
- Origin of Homo sapiens (discussion on the existence of heidelbergensis/rhodesiensis), evidence of hybridization, and other species (Homo naledi)
- Expansion of Homo sapiens to Australia and the Americas
- Upper Paleolithic and transition to the Neolithic
- The Neolithic Revolution

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
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Type: Directed			
Practices	4	0.16	9, 4, 12, 22, 18, 17, 21, 23, 25, 31, 30, 29, 26, 33, 8

Seminars	2	0.08	22, 18, 23, 31, 28, 29, 27, 7, 8
Theory	15	0.6	9, 5, 3, 2, 4, 1, 6, 10, 12, 11, 13, 14, 22, 15, 16, 19, 17, 20, 21, 25, 24, 32, 30, 29, 26, 33
Type: Supervised			
Group work	3	0.12	9, 4, 6, 12, 11, 15, 16, 20, 21, 24, 32, 28, 29, 33, 7, 8
tutoring	2	0.08	
Type: Autonomous			
Study	49	1.96	12, 32, 29, 8

The development of the course's formative activities is based on: theoretical classes, flipped classroom, seminars, and practical sessions in the laboratory and computer room, each with its own specific methodology.

These activities will be complemented by a series of tutorial sessions.

In the theoretical classes, students acquire the scientific knowledge specific to the subject by attending lectures supported by ICT tools, which are complemented by personal study of the topics covered. The audiovisual material used in class will be available to students through the "teaching materials" tool on the Virtual Campus. These classes are conceived as a fundamentally one-directional method of knowledge transmission from the teaching staff to the students, requiring the latter to develop autonomous learning strategies outside the classroom.

Seminars: a leading researcher will be invited to speak and debate on current topics.

Practical classes: students come into contact with laboratory materials and techniques. Results will be discussed at the end of each session and/or evaluable materials will be collected. Students will have access to protocols and practice guides via the Virtual Campus. The knowledge acquired in theoretical classes and through personal study is applied to solving practical cases. Students work in small groups, allowing them to develop teamwork, analytical, and synthesis skills. It also enables the application of statistical tools in data interpretation.

Tutorials: aimed at supervising group work, in which students will present a current and debatable topic in human evolution to the rest of the class, following a flipped classroom format.

Approximately 15 minutes of one class will be allocated for students to complete surveys evaluating teaching performance and the course or module.

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	Weighting	Hours	ECTS	Learning Outcomes
control	40	0	0	9, 5, 3, 2, 4, 1, 10, 13, 15, 16, 19, 20, 21, 25, 24, 32, 31, 30, 28, 29, 26, 27

Groupal work	40	0	0	5, 3, 4, 1, 6, 12, 11, 13, 14, 15, 19, 20, 21, 24, 31, 30, 28, 29, 33, 7, 8
Pràctical work	20	0	0	5, 3, 2, 22, 18, 17, 20, 23, 24, 26, 27

## Continuous Assessment

As this is a continuous assessment system, student participation, seminar preparation, practical materials, and the test score will all be taken into account. The final grade will be the weighted sum of each component.

A written exam will be conducted to assess the theoretical content of the course (40%), including content covered in the practical sessions. A minimum score of 4 out of 10 is required on this exam for it to be included in the final grade. This exam can be retaken during the resit period.

Practical sessions and seminars account for 20% of the final grade. Assessment will consider both student attitude and the work carried out in the lab, as well as the required reports. Attendance at practical sessions is mandatory and a requirement to pass the course. Students will receive a "Not Assessable" grade if their absence exceeds 20% of the scheduled sessions.

Group work accounts for 40% of the final grade. All students in the same group will receive the same grade for this component, with possible adjustments based on individual contributions to the group work.

To pass the course, the final grade must be equal to or greater than 5 out of 10.

A student will be considered "Not Assessable" if they have completed less than 50% of the assessment activities.

## Single Assessment

The single assessment consists of a single synthesis exam that evaluates the entire theoretical content of the course. The grade obtained in this synthesis exam will represent 40% of the final grade. This exam will take place on the same date scheduled for the continuous assessment exam, and the same resit policy will apply.

The assessment of practical sessions and seminars will follow the same process as in continuous assessment. The grade obtained will represent 60% of the final grade. Students opting for single assessment may submit all required evidence (practical report and seminar work) on the same day as the synthesis exam. The seminar work may be completed individually. The same resit policy and "Not Assessable" criteria as in continuous assessment will apply.

## Artificial Intelligence (AI)

### Permitted use:

"In this course, the use of Artificial Intelligence (AI) technologies is permitted as an integral part of the development of coursework, provided that the final result reflects a significant contribution from the student in terms of analysis and personal reflection. Students must clearly identify which parts were generated using AI, specify the tools used, and include a critical reflection on how these tools influenced the process and final outcome of the activity. Lack of transparency in the use of AI will be considered academic dishonesty and may result in a penalty in the activity grade or more serious sanctions in severe cases."

## Bibliography

### REFERENCES

Lee BERGER i John HAWKS 2017. *Almost humans: The Astonishing Tale of Homo naledi and the Discovery that changed our human story*. Ed. Penguin USA.

Robert BOYD i Joan B. SILK. 2004. *Como evolucionaron los humanos*. Ariel Ciencia.

Domingo CAMPILLO i M. Eulàlia SUBIRÀ. 2004. *Antropología Física para arqueólogos*. Ed. Ariel Prehistoria.

Eudald CARBONELL (Coordinador). 2005. *Homínidos las primeras ocupaciones de los continentes*. Ariel.

Clark Spencer LARSEN. 2010. *A Companion to Biological Anthropology*. Wiley-Blackwell.

Marina LOZANO i Xose Pedro RODRÍGUEZ. 2010. *Dón venim? l'origen de l'Homo sapiens*. Ed: Rafael Dalmau, col·lecció evoluciona núm 2.

Michael P. MUEHLENBEIN. 2010. *Human Evolutionary Biology*. Cambridge University Press.

Daniel TURBÓN. 2006. *La evolución humana*. Ariel.

#### SPECIFIC REFERENCES

La mayor parte de la asignatura se basará en bibliografía específica que se facilitará a lo largo de la impartición de la materia.

#### Software

Not required

#### Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	141	Catalan/Spanish	first semester	afternoon
(SEM) Seminars	141	Catalan/Spanish	first semester	morning-mixed
(TE) Theory	14	Catalan/Spanish	first semester	morning-mixed