



COURSE DATA

DATA SUBJECT

Code: 43126

Name: Seminar. Bioarchaeology and transitions in the western mediterranean

Cycle: Master's Degree

ECTS Credits: 3

Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
2143 - Master's Degree in Archaeology	Facultat de Geografia i Història	1	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2143 - Master's Degree in Archaeology	Introduction to research and professional practice in archaeology	ELECTIVES

COORDINATION

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SUMMARY

This subject is part of the subject Introduction to professional and research activity in Archeology. It has 3 ECTS credits. It has an optional character. It is taught in the second quarter.

It aims to delve into the ecological history of humanity based on the biotic remains that are cultural and biological heritage, essential to understand the processes of change, both cultural, like the climatic and the landscape. These processes will be exposed and debated. The objectives are can summarize:

- Valuation of biotic remains as historical documents.
- Knowledge of theories based on ecological postulates to explain the changes cultural, climatic, etc.
- Consult and discuss the specialized bibliography on these topics.
- Develop critical approaches to data analysis and interpretation.



In order to achieve these objectives, theoretical classes and participatory debates will be combined. In First, the professor will present the topics for debate in the face-to-face sessions, inform the specialized bibliography and the objectives to be discussed will be marked. Second, students will read the necessary bibliography and prepare the debate to be held at the end of the seminar with the participation of all enrollees.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

+tThere are no prerequisites except those stablissed to access to Master

COMPETENCES / LEARNING OUTCOMES

DESCRIPTION OF CONTENTS

1. Seminar. Bioarchaeology and Transitions in the western Mediterranean.

1. Climate change influenced cultural changes?
2. The domestication of plants and animals.
3. The intensification of agricultural production.

2. Tutored Work

Work carried out by students under the supervision of a tutor and aims to develop students' skills to face an issue researcher.

The topic will be determined by mutual agreement between students and tutors in the interest of the first. The activity involves an archaeological approach to a topic that is developed from literature sources and /or empirical.

The activity concludes with the preparation of a Power Point presentation 15 minutes, which will be discussed in public session before the rest of the students and teachers. Or you may choose other forms of presentation of the work.

**WORKLOAD****PRESENCIAL ACTIVITIES**

Activity	Hours
Theory	15,00
Total hours	15,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	20,00
Independent study and work	2,00
Preparation of lessons	38,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	60,00

TEACHING METHODOLOGY

In the classroom, the teacher will explain and explain those fundamental elements that should guide the student in the study and understanding of the subject in question, using the appropriate means for it.

Presentation of the topics:

- In the face-to-face sessions, the teachers will present the data of the different theories or problems to treat.
- The most significant bibliographical references will be given for each topic of debate.

Tutorial:

- Tutoring will help students in their searches for participation in the debate.

Debate:

Each student or group of students will choose to participate actively, that is, preparing and directing and moderating a topic to be discussed. In the other, two topics he will participate in the discussions but it will not be necessary to present a written work.

Each student will have to:



- 1.- Read the articles proposed by the teachers or selected by the students themselves to each of the topics covered in the seminar.
- 2.- Carry out a synthesis, results and personal assessment of the topic you choose.
- 3.- Public presentation in the face-to-face debate or by video conference.

New technologies will be incorporated to provide information to students. The virtual Classroom platform will have as a mission to favor the contact of the students with the subject outside the classroom, as well how to facilitate their access to selected and useful information for their non-contact work. I will access from this page, both the basic information about the subject (general objectives, program, ...) as a different complementary material

Assistance to Tutorials:

Students can attend the tutoring and student service hours that are scheduled each professor, to make consultations on any subject or aspect related to the subject, as well as with the realization of different jobs. You can also communicate with the teacher by half of the official email of the university.

The opening hours will be indicated on the first day of class and will be placed in the virtual classroom.

EVALUATION

The evaluation of the seminar will be based on:

- 1.- Attendance to classes and debates (10% of the grade).**
- 2.- Written presentation of the chosen debate work (60% of the grade), where it will be held in account:**
 - a) Quality of the contents.
 - b) Ability to synthesize.



- c) Oral and written presentation.
- d) Bibliography used.
- e) Student's personal contributions to the topic of debate.

3.- Active participation in the debates (30% of the grade). Where it will be valued:

- a) Oral and graphic expression.
- b) Ability to argue and criticize
- c) Respect for different opinions.

REFERENCES

- BADAL, E., CARRIÓN, Y., NTINO, M., MOSKAL-DEL HOYO, M., VIDAL, P. 2016. Punto de encuentro: los bosques neolíticos en varias regiones de Europa. En: Del neolítico a l'edat del bronze en el Mediterrani occidental. Estudis en homenatge a Bernat Martí Oliver. *Trabajos Varios* 119: 268-285. Museu de Prehistòria de València.
- BADAL, E., CARRIÓN, Y., CHABAL, L., FIGUEIRAL, I., THIÉBAULT, S. 2017. Neolithic Human Societies and Woodlands in the North-Western Mediterranean Region: Wood and Charcoal Analysis. In O. García-Puchol, D. Salazar-García (eds.) *Times of Neolithic Transition along the Western Mediterranean*. Springer, 135-169.
- BUXÓ, R., PIQUÉ, R. 2018. *Arqueobotánica: los usos de las plantas en la península Ibérica*. Ariel.
- CARRIÓN, J.S. et al. 2012. *Paleoflora y paleovegetación de la Península Ibérica e islas Baleares: Plioceno Cuaternario*. Ministerio de Economía y Competitividad, Universidad de Murcia, Fundación Séneca.
- CLUTTON-BROCK, J. 1999. *A natural history of domesticated mammals*. Cambridge: Cambridge University Press.
- CUBAS, M. et al. 2020. Latitudinal gradient in dairy production with the introduction of farming in Atlantic Europe. *Nature Communications*. <https://doi.org/10.1038/s41467-020-15907-4>
- DAVIS, S. 1997. *La arqueología de los animales*. Ed. Bellaterra.
- FULLER, D.Q., ALLABY, R., STEVENS, C. 2015. (2010) Domestication as innovation: the entanglement of techniques, technology and chance in the domestication of cereal crops. *World Archaeology*, 42:1, 13-28. DOI: 10.1080/00438240903429680.
- FULLER, D.Q. 2007. Contrasting patterns in crop domestication and domestication rates: recent archaeobotanical insights from the Old World. *Ann Bot* 100:903924
- EVERSHED, R. P. et al., 2008. Earliest date for milk use in the Near East and Southeastern Europe linked to cattle herding. *Nature* 455: 528-531.
- GROOT, M., LENTJES, D., ZEILER, J. 2013. Barely surviving or more than enough?: The environmental archaeology of subsistence, specialisation and surplus food production.



Sidestone Press.

- MORALES, J.; PÉREZ-JORDÁ, G.; PEÑA-CHOCARRO, L.; ZAPATA, L.; RUÍZ-ALONSO, M.; LÓPEZ-SÁEZ, J.A.; LINSTÄDTER, J. 2013. The origins of agriculture in North-West Africa: macrobotanical remains from Epipalaeolithic and Early Neolithic levels of Ifri Oudadane (Morocco). *Journal of Archaeological Science* 40: 2659-2669.
- PEÑA-CHOCARRO, L., PÉREZ JORDÁ, G. 2018. Los estudios carpológicos en la Península Ibérica: un estado de la cuestión. *Pyrenae*, 49 (1): 7-45.
- RUAS, M.P. (dir.) 2016. *Des Fruits d'ici et d'ailleurs: regards sur l'histoire de quelques fruits consommés en Europe*. Montreuil: Omniscience.
- SALQUE M. et al., 2012. Earliest evidence for cheese making in the sixth millennium BC in northern Europe. *Nature*. Doi: 10.1038/nature11698.
- VIGNES, J.-D. Y HELMER, D. 2007. Was milk a secondary product in the Old World Neolithisation process? Its role in the domestication of cattle, sheep and goats. *Anthropozoologica* 42 (2): 9-40.
- VIGNES, J.-D., HELMER, D. y PETERS, J (Eds), 2006. *The First Steps of Animal Domestication*. Oxbow Books.
- VAN ZEIST, W., WASYLIKOWA, K., BEHRE, K-E. (eds). 1991. *Progress in Old World Palaeoethnobotany. A retrospective view on the occasion of 20 years of the International Work Group for Palaeoethnobotany*. Balkema, 350 p. Rotterdam
- WEISS, E. KISLEV, M.E., HARTMANN, A. 2006. Autonomous cultivation before domestication. *Science*, 312: 1608-1610.
- CARRIÓN, Y. 2005. *La vegetación mediterránea y la atlántica de la península Ibérica. Nuevas secuencias antracológicas. Trabajos Varios del S.I.P. N° 104. 314p. Valencia*
- CHABAL, L. 2001. *Les Potiers, le bois et la forêt à Salle;les d'Aude (I-IIIe s. ap. J.-C.)* . In: Laubenheimer F. (Dir.), *20 ans de recherches à Sallèles d'Aude : le Monde des potiers gallo-romains*, Colloque 27-28 sept. 1996, Sallèles d'Aude, Presses Universitaires Franc-Comtoises, Série Amphores, Les Belles Lettres, pp. 93-110.
- MARTIN, L. 2014. *Premiers paysans des Alpes: alimentation végétale et agriculture au Néolithique*. Presses universitaires de Rennes: Presses universitaires François Rabelais de Tours.
- MARTÍNEZ VAREA, C.M. 2016. «Si bien buscas, encontrarás». Metodología para el análisis carpológico del Magdaleniense medio de la Cova de les Cendres (Teulada-Moraira, Alicante). *Pyrenae*, 47 (1): 73-93.
- NTINOU, M. BADAL, E., CARRIÓN, Y., MENÉNDEZ FUEYO, J.L., FERRER CARRIÓN, R., PINA MIRA, J. 2013. Wood use in a medieval village: the contribution of wood charcoal analysis to the history of land use during the 13th and 14th centuries A.D. at Poble d'lfach, Calp, Alicante, Spain. *Vegetation History Archaeobotany*. 22: 115-128. DOI 10.1007/s00334-012-0349-z.
- PEÑA-CHOCARRO, L. 1999. *Prehistoric agriculture in Southern Spain during the Neolithic and the Bronze Age: the application of ethnographic models*. Oxford: Archaeopress.
- PEÑA-CHOCARRO, L., PÉREZ JORDÁ, G., MORALES MATEOS, J., VERA RODRÍGUEZ, J.V. 2013. ¿Y llegaron los agricultores: agricultura y recolección en el occidente del Mediterráneo. *Menga* 4: 15-35.
- ZAPATA, L., LÓPEZ-SÁEZ, J.A., RUIZ-ALONSO, M., LINSTÄDTER, J., PÉREZ-JORDÀ, G., MORALES, J., KEHL, M. y PEÑA-CHOCARRO, L. 2013. Holocene environmental change and human impact in NE Morocco: Palaeobotanical evidence from Ifri Oudadane. *The Holocene* 23.9 : 1286-1296
- ZEDER, M.A. 2011. The Origins of Agriculture in the Near East. *Current Anthropology*, 52: S221-S235.
- ZEDER, M.A., EMSSHWILLER, E., SMITH, B.D., BRADLEY, D., 2006. Domestication: the intersection of genetics and archaeology. *Trends in Genetics*, 22- 3: 139-155.