

Degree	Type	Year
2500241 Archaeology	OT	3
2500241 Archaeology	OT	4

Contact

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Teachers

Cesar Carreras Monfort

Pau De Soto Cañamares

Teaching groups languages

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

Prerequisites

There are no prerequisites

Objectives and Contextualisation

The classical archaeology has of some technical resources that allow him face a part of his scientific work with a degree of reliability increasingly big. In this matter will analyse in depth the most specialised appearances of these instrumental tools by such to obtain some reliable results in the works of investigation and historical interpretation generated by the archaeological activity. Appearances like the analyses of ceramic pastes applied to the ceramologia; the study of the metalografía, the technicians of coin in the case of the ancient numismatist and the methods of planimetric lifting for the study of the architectural structures will be elements of study, also the knowledge of the materials lapidea.

On the other hand, the form of as collect and elaborate the documentation in the field and his treatment in the laboratory are basic to have of some samples the maximum of efficient and reliable have to be structured and practised in the classes by such to attain his documentary value. For this reason it will insist in you form them of graphic recording (drawing) of structures and archaeological objects, so much in the version of paper as in digital format. Besides, they will analyse resulted of the prospecciones geofísiques with suitable computer programs.

In this matter will expand many of the contents treated in other subjects but with a marked orientation verse the

classical archaeology.

Competitions to attain. The students will learn to

Be able to elaborate fichas of archaeological information referred to material

Know the applications and the limits of different instrumental resources applied, such as the ceramología and the numismatist.

Draw material and archaeological structures in paper and be able of digitalizarlos

Know and know value him the existence of the different methodologies of the planimetric lifting.

Be able to apply in each case the instruments that allow a good archaeological analysis of data of the prospección geophysics.

Know in a more specific degree the different instruments used in the classical archaeology.

Competences

Archaeology

- Generating innovative and competitive proposals in research and professional activity.
- Managing the main methods, techniques and analytic tools in archaeology.
- 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 ethic 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.

Learning Outcomes

1. Applying proper techniques and analytical tools in case studies.
2. Autonomously searching, selecting and processing information both from structured sources (databases, bibliographies, specialized magazines) and from across the network.
3. Drawing up conventional graphic documents: planimetry, topography, cartography, explanatory drawing.
4. Establishing investigation protocols for original research projects.
5. Explaining in oral and written form the characteristics of a Latin text of increasing difficulty.
6. Managing the main historical investigation techniques.
7. Mastering specific techniques and instrumental resources of archaeological laboratory analysis.
8. Mastering the specific techniques and instrumental resources of the archaeological excavations and surveys.
9. Organising and planning the search of historical information.
10. Reflecting on their own work and the immediate environment's in order to continuously improve it.
11. Submitting works in accordance with both individual and small group demands and personal styles.
12. Using computing resources of the area of study of history.
13. Using computing tools, both basics (word processor or databases, for example) and specialised software needed in the professional practice of archaeology.
14. Utilising the information collection tools such as bibliographical catalogues, archive inventories and electronic references.

Content

Block 1 Trade of amphoras and common ceramics

History of the investigation republican amphoras (practice)

Epigraphy imperial amphoras (practice)
 Quantification amphoras under imperial (practice)
 Practical of classification %one2013 pastes, reports and common
 Ceramic forms
 Seminar - Shipwreck cargo

Bloc 2 Extractive industries

Metal exploitation and mines
 Quarries
 Analysis metalographic and petrologic - practice
 Seminar A quarry

Bloc 3 Drawing

Principles of practical archaeologic drawing
 practical complex Drawings
 practical architectural Drawings
 digital Drawing - computer Classroom
 archaeologic Plants of AUTOCAD
 archaeologic Plants of AUTOCAD

Block 4 Geophysics-Demography

Resistivity - Practice GIS
 Magnetometria and GPR practice GIS
 Analysis of cases of interpretation and filters (reports)
 Calculations of populations (demography) and mobility (project ORBIS)

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Directed	30	1.2	1, 2, 6, 7, 8, 5, 9, 3, 14, 12, 13
Type: Supervised			
Supervised	15	0.6	1, 2, 6, 7, 8, 4, 5, 9, 11, 3, 10, 14, 12, 13
Type: Autonomous			
Autonomous 2	13	0.52	1, 2, 4, 14, 12
Autonomous 3	40	1.6	1, 2, 6, 7, 8, 4, 5, 9, 11, 3, 10, 14, 12, 13

The subject will base in activities in the classroom, so much the laboratory of archaeology like the computer classroom, resolve problems in group and autónomamente that has at most exponent the study of a group of materials like work of course. On the other hand, they will do some seminars of discussion by such to favour the critical vision in the use of determinate methodologies and his interpretation. Besides it will have the support of the Virtual Campus of the UAB.

1. Activities in the classroom.

The activities that will develop in the classroom will have like conductive thread the masterclass with support of presentations in power point together with the practices of study of materials and his graphic representation. On the other hand, they will give practical classes in the computer classroom with a theoretical introduction, but especially practical exercises to resolve graphic problems or of interpretation.

2. Seminars.

The subject includes a pair of Seminars with specialists invited that will pose a problematic methodological or interpretative, that will argue in the group. For this reason, the students will have to prepare the subject with antelación from readings, and argue with the speaker and the rest of mates, which would be the most adapted solution to answer to the problem presented. It treats then , to apply knowledges purchased and competitions of critical form in front of real situations.

3. The autonomous activity.

When treating of a very practical subject is important that the students use all the technicians and methods presented enel course. Therefore, it has designed an exercise tutorizado in group so that the students classify, draw, contextualise and interpret a group of material (ceramic, líticos and metallic) pertinent of an excavation and what can write a brief report.

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

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Exam - practical	30%	16	0.64	1, 6, 5, 11, 10
Excavation report	40%	20	0.8	1, 5, 9, 3, 12
Oral Presentation	30%	16	0.64	1, 2, 6, 7, 8, 4, 5, 9, 11, 3, 10, 14, 12, 13

1. Report on excavation material (70%).

1.a: Presentation (30%)

1.b: Technical report following the criterion of the Archaeological Service of the Generalitat (40%)

Competences to show for the obtaining of some results of optimum evaluation:

Knowledges:

- Show that the student has familiarised and dominates the archaeological documentary sources and the works of previous investigation to the start of any archaeological investigation of field
- Know develop a work of investigation formally correct so much regarding the structure like the references and the citations bibliographic.
- Show a correct assimilation of the exposed contents.

Skills:

- Use the main methods, technical and instruments of analysis of the archaeology
- Make conventional graphic documents: planimetry, topography, cartography, illustrative drawing
- Use the main computer instruments and of management of data and of the technology of the information and communication in general in the specific field of the historical sciences-archaeologic
- Recognise the importance to control the quality of the results of work and his presentations

2. Exam (30%).

Knowledges:

- Show that the student has familiarised and dominates the archaeological documentary sources and the works of previous investigation to the start of any archaeological investigation of field
- Know how to classify archaeological materials studied during the course

Skills:

- Summarise the main epistemological arguments and methodological in archaeology and the main technical of investigation

Reevaluación

- Review again the materials

This subject does not incorporate single assessment

Bibliography

General

Bowman, A. K. and Wilson, A. I. (eds) (2009) *Quantifying the Roman Economy: Methods and Problems*, Oxford Studies in the Roman Economy 1. Oxford University Press, Oxford.

Bowman, A. K. and Wilson, A. I. (eds) (2012), *Settlement, Urbanisation and Population*, Oxford Studies in the Roman Economy 2. Oxford University Press, Oxford.

Webs

The Oxford Roman Economy Project

<http://oxrep.classics.ox.ac.uk/>

Amphora trade

Carreras, C. (2000): *Economía de la Britannia romana: la importación de alimentos*. Barcelona

Casson, L. (1974): *Travel in the ancient world*. Londres.

Casson, L. (1985): *Ships and Seamanship in the Ancient World*. Londres.

Gould, R. (2000) *Archaeology and the Social history of ships*. Cambridge.

Keay, S.J. (1984): *Late Roman amphorae in the Western Mediterranean. A typology and economic study: the Catalan evidence*. Oxford, *British Archaeological Reports International Series*. Oxford.

Laubenheimer, F. (1985): *La production des amphores en Gaule Narbonnaise*. Paris.

Martin-Kilcher, S. (1994): *Die römischen amphoren aus Augst und Kaiseraugst. Ein Beitrag zur römischen Handels- und Kulturgeschichte II: Die Amphoren für Wein, fischsauce, Südfrüchte (Gruppen 2-24): und Gesamtauswertung*. Augst

Peacock, D.P.S.; Williams, D.F. (1986): *Amphorae and the Roman Economy*. London.

Peña, J.T. (2007) *Roman Pottery in the Archaeological Record*. New York: Cambridge University Press, 2007

Tomber, R. (1993) "Quantitative approaches to the study of long-distance exchange". *Journal of Roman Archaeology* 6, 142-162.

Webs

Amphorae ex Hispaniae

<http://amphorae.icac.net/>

Roman amphorae: a digital source

http://archaeologydataservice.ac.uk/archives/view/amphora_ahrb_2005/

FACEM

<http://facem.at/>

CEIPAC

<http://ceipac.gh.ub.es/>

Drawing

Alvarez, R.; Molist, N. (1988) *El dibuix de material arqueològic*. Dossier núm VIII. Soc.Catalana d'Arqueologia. Barcelona

- Brodribb, V. (1970) *Drawing archaeological finds for publication*. London.
- Conlon, V.M. (1973) *Camera Techniques in Archaeology*. U.Michigan.
- Chéné, A.; Réveillac, G. (1975) *La photographie en archéologie. Les appareils, la prise de vue, les techniques*. Les dossiers d'archéologie 13. Paris.
- Chéné, A.; Foliot, P.; Réveillac, G. (1999) *La fotografia en archeologia*. Milano.
- Dorrell, P. (1994) *Photography in Archaeology and Conservation* (2nd edition, Cambridge University Press, 1994)
- Fonollà, A. (1984) *Apunts de dibuix arqueològic*. Badalona.
- Grey, T. (2006) *Color Confidence: The Digital Photographer's Guide to Color Management*. N.York.
- Harp, E. (1975) *Photography in archaeological research*. U.Mexico.
- Howell, C.L. (1995) *A Practical Guide to Archaeological Photography* (Archaeological Research Tools)
- Necci, M. (1992) *La fotografia archaeologica* (Studia NIS archaeologia 13). Roma.
- Pérez Cuadrado, S. (2008) *Manual básico de dibujo de materiales arqueológicos*. Murcia.
- Rigoir, Y (1975) "Le dessin technique en céramologie". *Laboratoires d'étude et documentation des sigillées paléochrétiennes*. Lambsech.
- Schlitz, M. (2005) 'Archaeological Photography' in *The Focal Encyclopaedia of Photography*, Fourth Edition, Elsevier Inc. Massachusetts
- Simmons, H.C. (1969) *Archaeological Photography*. London.

Webs

Advice on all digital imaging issues.

<http://www.tasi.ac.uk/index.html>

Archaeology and photography -Michael Shanks

<http://metamedia.stanford.edu/projects/MichaelShanks/943>

Dave Webb's gallery of Diggers

<http://www.archdiggers.co.uk/diggers/frameset.html>

Projecte Orbis

<http://orbis.stanford.edu/>

Drawing of archaeological architecture

Ackerman, J., 2003. *Architettura e disegno*. Milà: Electa.

Adkins, L. & Adkins, R., 1989. *Archaeological Illustration*. Cambridge: Cambridge Publications.

Aitchison, K., 1999. *Profiling the Profession. A survey of archaeological jobs in the UK*. Londres: Council for British Archaeology, English Heritage and the Institute of Field Archaeologists.

Almagro Gorbea, A., 2004. *Levantamiento arquitectónico*. Granada: Universidad de Granada.

- Bianchini, M., 2008. *Manuale di rilievo e di documentazione digitale in archeologia*. Roma: Aracne Editrice.
- Caballero, L., 2006. El dibujo arqueológico: Notas sobre el registro gráfico en arqueología. *Papeles del Parpal*, Issue 3, pp. 75-95.
- Carandini, A. & altri, 1984. *Settefinestre. Una villa schiavistica nell'Etruria Romana*. Modena: Ed. Panini.
- D'Andrea, A., 2008. Metodologie laser scanning per il rilievo archeologico: metodi operativi e standard di documentazione.. En: *L'informatica e il metodo della stratigrafia*. Bari: Edipuglia, pp. 123-134.
- de Luis, I. & Merrony, C., 2010. *Dibujo de campo y topografía para arqueólogos*. Milà: EDAR Arqueologia y Patrimonio. Hugony Editore.
- Di Grazia, V., 1991. *Rilievo e disegno nell'archeologia e nell'architettura*. Roma: s.n.
- Docci, M. & Maestri, D., 1984. *Il rilevamento architettonico. Storia, metodi e disegno*. Bari: s.n.
- Filippi, F., Attilia, L. & De Pace, A., 2007. *Riconstruire l'antico prima del virtuale. Italo Gismondi, un architetto per l'archeologia (1887-1974)*. Roma: Catàleg d'exposició. Museo Nazionale Romano a Palazzo Altemps. Abril-Juny 2007.
- Giuliani, C., 2007. Il rilievo dei monumenti, l'immaginario collettivo e il dato di fatto. En: *Reconstruire l'Antico prima del virtuale. Italo Gismondi, un architetto per l'archeologia (1887-1974)*. Roma: Catàleg d'exposició. Roma Museo Nazionale Romano a Palazzo Altemps. Abril-Juny 2007, pp. 63-75.
- Giuliani, C. F., 1983. *Archeologia. Documentazione grafica*. Roma: de Luca editore.
- Jodar, A., 2006. *Por dibujado y por escrito*. Granada: Universidad de Granada.
- Lanciani, R., 1893-1901. *F.U.R. Forma Urbis Romae*. Roma-Milà: s.n.
- Luis, I. d. & Merrony, C., 2010. *Dibujo de campo y topografía para arqueólogos*. Barcelona: Colección Estudios EDAR.
- Manetti, R., 1989. *Rilievo e disegno: analisi e rappresentazione architettonica.. s.l.:Alinea*.
- Medri, M., 1988. La pianta composita nella documentazione e nell'interpretazione dello scavo. En: *Archeologia e restauro dei monumenti*. s.l.:s.n., pp. 305-334.
- Medri, M., 2003. *Manuale di rilievo archeologico*. Bari: s.n.
- MoLAS, 1994. *Archeological Site Manual*. Londres: Museum of London.
- Rizzas, S., 1999. *La rappresentazione di architetture antiche*. Palermo: s.n.
- Geophysics and demography
- Bowman, A. K. and Wilson, A. I. (eds) (2012), *Settlement, Urbanisation and Population, Oxford Studies in the Roman Economy 2*. Oxford University Press, Oxford.
- Clark, A. (1996) *Seeing beneath the soil*. Oxford.
- Gaffney, C.; Gater, J. (2003) *Revealing the buried past*. Stroud.
- Gracia, F.; J.M.Gurt; C.Carreras; G.Munilla (eds)(2001) *Jornades d'Arqueologia i Tecnologies de la Informació i la Comunicació: Recerca, Docència i Difusió*. Arqueomediterrània 21, Barcelona.

Lock, G.; Stančić, Z. (eds.) (1995) *Archaeology and Geographical Information Systems: A European Perspective*, London.

Scollar, I.; A. Tabbagh; A. Hesse; I. Herzog (1990) *Archaeological prospecting and remote sensing*. Cambridge.

Wheatley, D.; M. Gillings (2002) *Spatial archaeology. The archaeological application of GIS*. London.

Extractive industries

Adams, A.E.; MacKenzie, W.S.; Guilford, C. (1991) *Atlas of sedimentary rocks under the microscope*. London.

Àlvarez, A. et alii (2009) *Marbles and Stones of Hispania. Exhibition catalogue*. Tarragona: Institut Català d'Arqueologia Clàssica.

Buchwald, V.F. (2005) *Iron and steel in ancient times*, The Royal Danish Academy of Sciences and Letters. Copenhagen.

Dodge, H.; Ward-Perkins, B. (1992) *Marble in Antiquity. Collected papers of J.B. Ward-Perkins*. British School at Rome. Roma.

Gutierrez, A. (2009) *Roman quarries in the Northeast of Hispania (Modern Catalonia)*. Tarragona.

Hamilton, D. (1996) *Basic Methods of Conserving Underwater Archaeological Material*, Culture Naval Historical Center. EE.UU.

Henderson, J. (2000) *Science and Archaeology of Materials: An Investigation of Inorganic Materials*, Bell & Bain. Reino Unido.

Herz, N., Waelkens, M. (eds.) (1988) *Classical Marble: Geochemistry, Technology, Trade*

Montero, I. et alii (2010) *Manual de arqueometalurgia*. Madrid

Peacock, D.P.S.; Maxfield, V. (1997) *Mons Claudianus: survey and excavation 1987-1993*. El Cairo.

Pensabene, P. (1994) *La vie del marmo*. Rome.

Tylecote, R.F. (1976) *A History of Metallurgy*, The Metals Society.

Glass

Allen, D., 1998. *Roman Glass in Britain*. Princes Risborough, Buckinghamshire, Shire Publications.

Amrein, H., 2001, L'atelier de verriers d'Avenches. L'artisanat du verre au milieu du 1er siècle après J.-C., Cahiers d'archéologie romande 87, Lausanne 2001.

Baxter, M. J., H. E. M. Cool, et al., 2006. Comparing glass compositional analyses. *Archaeometry* 48/3, 399-414.

Biek, L. and J. Bayley, 1979. Glass and other Vitreous Materials. *World Archaeology* 11, Early Chemical Technology/1, 1-25.

Brill, R. H., 1999. *Chemical Analyses of Early Glasses*. New York, Corning Museum of Glass.

Caldera de Castro, M. d. P., 1990. Roman glass in southwest Spain. In *Annales du 11e Congres*. Amsterdam.

Caron, B., 1993. A Roman Figure-Engraved Glass Bowl. *Metropolitan Museum Journal* 28, 47-55.

Dussart, O., B. Velde, et al., 2004. Glass from Qal'at Sem'an (Northern Syria): The reworking of glass during the transition from Roman to Islamic compositions. *Journal of Glass Studies* 46, 67-83.

Fleming, S. J., 1999. *Roman Glass; reflections on cultural change*. Philadelphia, University of Pennsylvania Museum of Archaeology and Anthropology.

Forbes, R. J., 1966. *Studies in ancient technology V*. Leiden, Brill.

Freestone, I. C., 2005. The provenance of ancient glass through compositional analysis. *Materials Issues in Art and Archaeology* 7.

Freestone, I. C., M. Ponting, Hughes, M.J., 2002. Origins of Byzantine glass from Maroni Petrera, Cyprus. *Archaeometry* 44, 257-272.

Price, J., 1990. A survey of the Hellenistic and early Roman vessel glass found on the Unexplored Mansion Site at Knossos in Crete. *Annales du 11e Congres*. Amsterdam.

Stern, E. M., *Roman Mould-blown Glass*. Rome, Italy: L'Erma di Bretschneider in association with the Toledo Museum of Art.

Stern, E. M., 1991. Early Exports Beyond the Empire. *Roman Glass: two centuries of art and invention*. M. Newby and K. Painter. London: Society of Antiquaries of London.

Stern, E. M., 1999. Roman Glassblowing in a Cultural Context. *American Journal of Archaeology* 103/3, 441-484.

Stern, W. B., 1990. The composition of Roman glass. In: *Annales du 11e Congres*. Amsterdam.

Whitehouse, D., 1990. Late Roman cameo glass. In: *Annales du 11e Congres*. Amsterdam.

Whitehouse, D., 1991. Cameo Glass. *Roman Glass: two centuries of art and invention*. M. Newby and K. Painter. London: Society of Antiquaries of London.(UK)

Software

AUTOCAD, IDRISI, MESHROOM

Language list

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	1	Catalan	second semester	morning-mixed
(TE) Theory	1	Catalan	second semester	morning-mixed