

Academic Year/course: 2022/23

## 61261 - Landscape Archaeology

### Syllabus Information

**Academic Year:** 2022/23

**Subject:** 61261 - Landscape Archaeology

**Faculty / School:** 103 - Facultad de Filosofía y Letras

**Degree:** 553 - Master's in the Ancient World and Archaeological Heritage

**ECTS:** 4.0

**Year:** 1

**Semester:** First semester

**Subject Type:** Optional

**Module:**

### 1. General information

### 2. Learning goals

### 3. Assessment (1st and 2nd call)

### 4. Methodology, learning tasks, syllabus and resources

#### 4.1. Methodological overview

- The methodology followed in this course is oriented towards the achievement of the learning objectives.
- Students are expected to participate actively in the class throughout the semester.
- Further information regarding the course will be provided on the first day of class.
- The approach, methodology and evaluation of this guide are prepared to be the same in any teaching setting. They will conform to socio-sanitary conditions of each moment, as well as the indications given by the competent authorities

#### 4.2. Learning tasks

- Theoretical lectures.
- Practical lectures.
- Individual work.
- Personal study.
- Assessment activities.

#### 4.3. Syllabus

Part I SPATIAL ARCHAEOLOGY: LANDSCAPE AND TERRITORY

## 1. Spatial Archaeology. General concepts.

- The man-environment relationship: culture and adaptation to the environment.
- Terminological issues: concepts of Landscape, Environment, Ecology and Ecosystem: application in humanistic research.
- The environment as a system (environmental system / sociocultural system).
- The ecological perspective in Environmental (Landscape) Archaeology.
- Glossary of terms.

## 2. Theory, methods and models of Landscape Archaeology.

- Epistemology and evolution of space studies in Archaeology. Precedents: the British Field Archaeology. The Cambridge School and the influence of Locational Geography.
- Direct and indirect methods of landscape study. Definition and identification of structural factors. Design and data. collection: bibliographic-documentary resources, prospection, on site off site registration, modelling.
- Geoarchaeological analysis and classification of the landscape: geographical, spatial (resource catchment, territoriality, intervisibility) and ecological-cultural analysis.
- The Geographic Information Systems in Archaeology: applications, limits and persecutions. Data collection. Landscape modelling. Revaluation and conservation of Cultural Heritage.

## Part II PALEOENVIRONMENT: TECHNIQUES OF LANDSCAPE RECONSTRUCTION

### 3. The environment in the past

- Characteristics and environmental transformations during the Quaternary.
- Climate research at a global level.

### 4. Reconstruction of the landscape and the relief: Geoarchaeology

- Terminological issues: Geomorphology and Geoarchaeology.
- Morphoclimatic systems and climate-process relationships.
- Human impacts on the landscape and the relief.

### 5. Botanic environment reconstruction: Archaeobotany

- Introduction: definition, history of the discipline, goals and limitations.
- Plant micro-rests: pollen, phytoliths and diatoms.
- Plant macro-rests: wood, charcoal, seeds and fruits.
- From field to laboratory: sampling strategies, analysis and interpretation of the results.

### 6. Animal environment reconstruction: Archaeozoology

- Principles of Archaeozoology: definition and history of research.
- Methods for the study of Archaeozoology: anatomical and taxonomic identification; death age calculation; sex identification; biometrics; Quantification indices (NR, NISP, NME, NMI).
- Principles of Taphonomy: definition, set types, types of processes tafonómicos (anthropogenic, natural, physical and chemical).
- New methods of archaeozoological analysis: stable isotopes, micro-wear, ZooMS, DNA.
- Animal domestication: theoretical principles and methods to study it.

## 4.4. Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the Facultad de Filosofía y Letras.

See the academic calendar of the University of Zaragoza (<http://academico.unizar.es/calendario-academico/calendario>) and the website of the Faculty of Philosophy and Arts (*Schedule of classes*: <https://fyl.unizar.es/horario-de-clases#overlay-context=horario-de-clases>; Examination schedule: <https://fyl.unizar.es/calendario-de-examenes#overlay-context=>)

More information will be provided on the first day of class.

#### 4.5. Bibliography and recommended resources

- Part I SPATIAL ARCHAEOLOGY: LANDSCAPE AND TERRITORY
  1. Spatial Archaeology. General concepts.
    - The man-environment relationship: culture and adaptation to the environment
    - Terminological issues: concepts of Landscape, Environment, Ecology and Ecosystem: application in humanistic research
    - The environment as a system (environmental system / sociocultural system)
    - The ecological perspective in Environmental (Landscape) Archaeology
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    - Direct and indirect methods of landscape study. Definition and identification of structural factors. Design and data collection: bibliographic-documentary resources, prospection, on site off site registration, modelling
    - Geoarchaeological analysis and classification of the landscape: geographical, spatial (resource catchment, territoriality, intervisibility) and ecological-cultural analysis
    - The Geographic Information Systems in Archaeology: applications, limits and persecutions. Data collection. Landscape modelling. Revaluation and conservation of Cultural Heritage

#### Part II PALEOENVIRONMENT: TECHNIQUES OF LANDSCAPE RECONSTRUCTION

3. The environment in the past
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  - Climate research at a global level
4. Reconstruction of the landscape and the relief: Geoarchaeology
  - Terminological issues: Geomorphology and Geoarchaeology
  - Morphoclimatic systems and climate-process relationships
  - Human impacts on the landscape and the relief
5. Botanic environment reconstruction: Archaeobotany
  - Introduction: definition, history of the discipline, goals and limitations
  - Plant micro-rests: pollen, phytoliths and diatoms
  - Plant macro-rests: wood, charcoal, seeds and fruits
  - From field to laboratory: sampling strategies, analysis and interpretation of the results
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  - Methods for the study of Archaeozoology: anatomical and taxonomic identification; death age calculation; sex identification; biometrics; Quantification indices (NR, NISP, NME, NMI)
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