



**Centre d'Estudis Patrimoni  
Arqueològic Prehistòric**

**UB**  
Universitat Autònoma de Barcelona

  
**CONNECTICUT  
COLLEGE**

## **COVA GRAN ARCHAEOLOGICAL PROJECT, SPAIN: HUMAN SETTLEMENT IN THE SOUTH PYRENEES IN THE PAST 50,000 YEARS**

**Course ID: ARCH 365E**

**June 24-July 28, 2018**

### **DIRECTORS:**

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### **INTRODUCTION**

Human settlements in mountain landscapes are important for the understanding of prehistoric lifestyles. Investigation of sites with evidence of hunting and gathering practices shed light on utilization of resources, adaptation to the environment and social structures and organization. While hunting and gathering practices have been documented and are well known at some parts of the Old World, understanding its manifestation in the south Pyrenees of Spain remains elusive. Archaeological sites attributed to the Upper Pleistocene and Holocene are rare in this region and it is difficult to trace human occupation trends throughout these periods. The notion that the south Pyrenees could be considered an “empty” landscape deserves to be explored.

Cova Gran de Santa Linya (Lleida, Catalunya) (<http://cepap.uab.cat/recerca.htm>) is a rock shelter located at the seam between the first range of the southern Pyrenees. The cave is rich with evidence of human occupation covers the last 50,000 years of human settlement in the area.

Investigation at the site allows us to recognize both the evolution of foragers groups and the differences between Neanderthals and Modern human adaptive strategies. The archaeological sequence at Cova Gran contains animal bones, hearths and Middle and Upper Paleolithic artifacts. The Early Upper Paleolithic assemblages contributes to the debate of the Middle/Upper Paleolithic “transition.

In addition, excavations at Cova Gran confirmed the existence of important cultural deposits related to human occupation dated to Last Maximum Glacial (Magdalenian). Finally, evidence indicates the appearance of the first farmers in the south Pyrenees.

The long human occupation sequence at Cova Gran provides excellent opportunities to explore and document an extensive cultural sequence of the region, beginning *ca.* 50,000 years ago. This rock shelter permits testing of multiple hypotheses and models that explain local adaptations and cultural evolution that are essential to the understanding of evolutionary prehistoric processes that affected the people living in the Western Mediterranean. It also helps in understanding fundamental historic events like the spread of modern humans 40,000 years ago to the Iberian Peninsula and the Neolithic revolution.

#### ACADEMIC CREDIT UNITS & TRANSCRIPTS

**Credit Units:** Attending students will be awarded 8 semester credit units (equivalent to 12 quarter credit units) through our academic partner, Connecticut College. Connecticut College is a private, highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see grading assessment and matrix). This field school provides a minimum of 160 direct instructional hours. Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institutions prior to attending this field school.

**Transcripts:** An official copy of transcripts will be mailed to the permanent address listed by students on their online application. One additional transcript may be sent to the student's home institution at no additional cost. Additional transcripts may be ordered at any time through the National Student Clearinghouse: <http://bit.ly/2hvurkl>.

#### COURSE OBJECTIVES

This course has two goals:

- To provide students a practical working knowledge of **archaeological field methods**, including survey, excavation, laboratory analysis, artifact cataloging, and conservation;
- To introduce students to the **intellectual challenges presented by archaeological research**, including research design, the interpretation of data, and the continual readjustment of hypotheses and field strategies with regard to information recovered in the field.

Cova Gran Archeological Project (CGAP) is a collaborative program between the Institute for Field Research (IFR), Universitat Autònoma de Barcelona (CEPAP-UAB) and Centro Nacional de Investigación Evolución Humana in Burgos (CENIEH). This program will combine lectures, field survey, excavation and laboratory training. The course begins on Sunday June 24 until Saturday July 28 of 2018.

#### COURSE PREREQUISITES

None. This is hands-on, experiential learning and students will study onsite how to conduct archaeological research. Archaeology involves physical work and exposure to the elements and thus, requires a measure of acceptance that this will not be the typical university learning environments. You will get sweaty, tired and have to work in the outdoors.

Students are required to come equipped with sufficient excitement and adequate understanding that the archaeological endeavor requires real, hard work (sometime in the sun) on your feet and with your excavation equipment.

#### **DISCLAIMER – PLEASE READ CAREFULLY**

Archaeological field work involves physical work in the outdoors. You should be aware that conditions in the field are different than those you experience in your home, dorms or college town. Archaeological fieldwork at Cova Gran may be physically demanding and mentally challenging. You should be prepared for conditions that include hot and dry days. There is little relief during the night. Pollen and dust are in abundance. Expect to work long days excavating at the site and working in the lab.

If you have any medical concerns, please discuss them with your doctor. You are welcome to discuss conditions with your project director as well.

#### **METHODOLOGY**

**Excavation:** The goal of the excavation is the retrieval of artifacts, bones, and remnants of hearths. A work program will be established beforehand detailing the tasks and the sequence in which they will be performed during the excavation. Participants will be trained in the specific tasks assigned to them as well as on the general objectives of the excavation. Sediments will be sifted in order to retrieve micro artifacts, seeds and micro vertebrates. Personal digital assistant (PdA) will be used onsite to register and process the data, with topographic instruments being directly linked to the computer system.

**Lab Work:** lab work a key part of our archeology strategy and includes inventory, classification and initial study of the artifacts, bones and archeological structures found at the site. The project management will train all the participants in the study of the material retrieved during the excavation. We will discuss the daily activities to be performed and the results that are being obtained in order to plan for the work ahead and in order to get the participants fully involved in the project. Also, regular talks will be held in order to introduce the participants in the archeological and evolutionary meaning of Neanderthals and to discuss the different theories surrounding this species.

#### **GRADING MATRIX**

General framework of evaluation is presented below:

**60 % Field Participation & Collaboration** – This encapsulates daily participation and progress in learning techniques of excavation, survey and lab work. Students will be trained to carry out accurate, careful archaeological work, how to use all basic field equipment, and how to comprehensively record data. Ability to carefully observe and follow instructions regarding field procedures, preparing forms, identifying artifacts, processing screen residue, and overall attentiveness in class are all important. Each student is expected to develop a solid grasp of recording procedures (provenience, soil attributes, excavation notes, computer data base in the field and in the lab, etc.).

Equally important is overall good citizenship and cooperation as part of the archaeological research team. Archaeology requires commitment to promptness; cooperation in loading and unloading gear at the beginning and end of each field day; anticipating field tasks; helping fellow team members with recording, measurements, excavation, and lab tasks; helping to maintain group morale.

**15% Practical Exam** – The practical exam allows students to demonstrate competency in a range of field and lab skills instructed over the course on the field class.

**25% Final essay**– Student will present a paper with a maximum length of 10 pages, explaining the participation in the project, and the meaning of Cova Gran to contextualize human settlement in Western Europe. Students will be assessed on their ability to organize the information and competency of the readings. Recommendations to ameliorate the program will be welcome.

## ACCOMMODATIONS

Students will stay at the Alberg la Cova hostel (<http://alberglacova.com>) at Sant Llorenç de Montgai. This village is approximately 30 km north of Lleida (Catalunya, Spain). The building has excellent facilities with communal space, laundry and wifi.

Students will share communal bedrooms (6-8 people in each room). Alberg la Cova will provide sheets, which will be changed regularly. All team members must participate in setting tables for meals and do the washing up and clean common shared spaces after lunch and dinner (living room, bedroom).

Breakfast, lunch and dinner are provided by the program. On free days, students may choose to take their meals at local restaurants in the area.

While the project may accommodate some dietary needs, you must communicate with project directors to ensure your needs can be met in the field. Celiac and vegetarian diets may be afforded but other types of diet may be more challenging to be managed.

## TRAVEL & MEETING POINT

Students will meet at the Bar-Cafeteria at **Lleida-Pyrenees RENFE railway on Sunday June 24<sup>th</sup> at 6:00pm** (18 hr). Trains to Lleida-Pyrenees depart from Sants RENFE train station at Barcelona frequently. Trains from the Barcelona airport to Sants station depart every 30 minutes. Trains schedule from Sants station to Lleida Pirineus can be found at <http://www.renfe.com/EN/viajeros/index.html>.

This program will conclude afternoon of Friday, July 28. Students should plan onward travel or flights back home for anytime on Saturday, July 29.

## VISA REQUIREMENTS

Spain form part of the Schengen Agreement. US citizens may enter Spain for up to 90 days for tourist or business purposes without a visa. Stiff fines may be imposed for overstaying the 90-day period. Your passport should be valid for at least three months beyond the period of your stay.

## EQUIPMENT LIST

Tools used in the excavation and lab will be provided by the project. For personal items, student should bring the following:

- |                               |   |
|-------------------------------|---|
| ✓ Shower towel                | ✓ Long and short sleeve cotton shirts     |
| ✓ Shower sandals              | ✓ Socks                                   |
| ✓ Wide brim hat or head cover | ✓ Tennis shoes ( <u>not rigid boots</u> ) |
| ✓ Canteen or water container  | ✓ Insect repellent                        |
| ✓ Sunscreen                   | ✓ Sunglasses with UV protection           |
| ✓ Light jacket or rain coat   | ✓ Beach towel & swim suite                |
| ✓ Light cotton work pants     | ✓ Personal medication                     |

## COURSE SCHEDULE

**Fieldwork schedule week 1-5** (tentative time table):

**Monday to Friday:**

**9:00 -12:00 AM:** Lab work, lectures & discussion in Sant Llorenç de Montgai facilities.

**12:30- 14:30 PM:** Lunch & Free time.

**14:30-20:00 PM:** Fieldwork in Cova Gran.

**21:00 PM:** Diner

**Saturday and Sunday:** Free time

#### **LECTURE SCHEDULE**

Two lectures will be presented to students each week. Lecture will be 45-60 minutes each and presented by project staff. Below are the lecture titles and themes. Specific time/dates will be announced at the beginning of each week:

- **Lecture 1: Human settlement during the Upper Pleistocene at the south face of the Pyrenees.** Reading: Mora et al. 2011.
- **Lecture 2: Practicum: introduction to Cova Gran artifacts: workshop on lithics, bones, ceramics and bone tools found at Cova Gran.** Staff Cova Gran Archaeological Project.
- **Lecture 3: Fieldwork methodology.** Readings: Martínez-Moreno et al. in press.
- **Lecture 4: The archaeosequence of Cova Gran.** Readings: Mora et al. 2011, Mora et al. 2014.
- **Lecture 5: Site formation processes in Cova Gran.** Reading: Mora et al. 2011, Polo et al. 2014.
- **Lecture 6: Neanderthals at the southeastern Prepyrenees.** Reading: Martínez-Moreno et al. 2010,
- **Lecture 7: The Middle to Upper Paleolithic “transition” in Cova Gran.** Reading: Mora et al. in press
- **Lecture 8: Late Glacial adaptations in Cova Gran.** Reading: Mora et al. 2011.
- **Lecture 9: Early farmers and shepherds in the South of the Pyrenees.** Reading: Polo et al. 2014.

#### **EXCURSIONS**

La Noguera has an astonishing prehistoric, historic and landscape heritage. There will be field trips to:

- *Life and war at la Marca superior:* La Noguera was the conflictual border between Muslim and Christian kingdoms in the Middle Ages. Castles, Muslim villages and monasteries testify the Islamic and Christian conflicts along the IX-XII centuries (<http://www.balaguer.cat/turisme>)
- *Roca dels Bous rockshelter* offers the possibility to learn how Neanderthals inhabited the Pyrenees 40000 years ago. This living project proposes an interactive visit combining the use of digital tablets (iPAD) with the research advances carried out year after year. This window to the past facilitates understanding of the traces preserved at the site allowing to the participants to understand Neanderthals activities in the repeated visits to the shelter (<http://www.larocadelsbous.cat/en>);
- *La Noguera landscape:* a walk into scenic's landscapes of Mont-Rebei and Camarasa gorges (<http://www.lleidatur.com/Turisme/Visita/Espai-Natural-Congost-de-Mont-rebei/177.aspx>);
- *Parc Arqueològic-Sant Llorenç de Montgai:* educational and leisure facility designed to show what prehistoric life may have been like and introduce the methods of research used by archaeology. Its ultimate aim is to promote awareness of prehistoric heritage in the context of the surrounding landscape ([http://cepap.uab.cat/en/campus\\_noguera\\_archaeological\\_park](http://cepap.uab.cat/en/campus_noguera_archaeological_park))

***The program has limited free time for independent sightseeing. Please consult with the faculty about independent travel during the program.***

#### **READINGS**

Cova Gran has an extensive bibliography published essentially in English in international prestigious journals. All readings may be downloaded through the project website <http://cepap.uab.cat/covagran>

Students are strongly encouraged to read before to participate in the project the following these selected articles. This will greatly benefit lectures and class discussions.

Martínez-Moreno, J., et al. 2010. The Middle-to-Upper Palaeolithic Transition in Cova Gran and the extinction of Neanderthals in the Iberian Peninsula. Journal of Human Evolution 58: 211-226.

Martínez-Moreno, J., et al. 2015. From site formation processes to human behaviour: Towards a “constructive” approach to depict palimpsests in Roca dels Bous. Quaternary International. <http://dx.doi.org/10.1016/j.quaint.2015.09.038>

Mora, R., et al. 2011. Chrono-stratigraphy of the Upper Pleistocene and Holocene archaeological sequence in Cova Gran. Journal of Quaternary Science 26: 635–644.

Mora, R., et al. 2014. A key sequence in the Western Mediterranean Prehistory: Cova Gran de Santa Linya (Pre-Pyrenees in Lleida). In: *Pleistocene and Holocene hunter-gatherers in Iberia and the Gibraltar strait*: 162-166. Burgos.

Mora, R., et al. 2017. Contextual, technological and chronometric data from Cova Gran: Their contribution to discussion of the Middle-to-Upper Paleolithic transition in northeastern Iberia. Quaternary International. <http://dx.doi.org/10.1016/j.quaint.2016.05.017>

Polo, A., et al. 2014. Prehistoric herding facilities: site formation and archaeological dynamics in Cova Gran de Santa Linya. Journal of Archaeological Science 41: 784-800.

#### **RECOMMENDED READINGS**

Neanderthals, anatomically modern humans, hunter-gatherer lifestyle and other issues dealt with in the project have an immense bibliography. As general introductory readings, we suggest the following general books that it can easily be found at your local university library.

Binford, L. 1983. *In Pursuit of the Past: Decoding the Archaeological Record*. Thames & Hudson.

Gamble, C. 1999. *The Paleolithic societies of Europe*. Cambridge Univ. Press.

Mithen, S. J. 2003. *After the Ice: global human history-20,000-5,000 BC*. Weidenfeld & Nicolson.

Klein. R. 2009. *The Human Career*. Univ. Chicago Press.

Stringer, C., Gamble. C. 1993. *In search of Neanderthals*. Thames & Hudson.

Stringer, C., Andrews, P. 2006. *The complete world of Human Evolution*. Thames & Hudson.