



SANISERA
ARCHAEOLOGY INSTITUTE
for International Field Schools

Course 041

Discover the Underwater Archaeology of the Port of Sanitja & Archaeological Techniques of drawing, photography and digital illustration (Menorca – Balearic Islands – Spain)

1. General Information

The Sanisera Archaeology Institute for International Field Schools offers an annual archaeology dig on the island of Menorca, off the coast of Spain. This course is for students interested in underwater archaeology who come from all over the world. It covers advanced and essential techniques used in an archaeological laboratory, such as technical drawing and photo-taking. The skills that students will learn can be externalized to complete studies, publications, or reports from the pieces found on any site.

This program is divided in two main parts:

During the first part of the course students will gain **experience in underwater archaeological survey**, exploring the Ancient Port of Sanitja and the coast of the Cape of Cavalleria. The aim of this project is to identify structures of the Roman city of Sanisera and underwater shipwrecks, as well as the associated cargo including amphora and anchors.

During the second part of the course, students will learn the **Tools and laboratory techniques** used with archaeological material.

Part 1. Explore Underwater Archaeology of the Ancient Port of Sanitja

Over the past eight years, The **Underwater School in Archaeology** has researched the ancient port **of Sanitja** via an intensive survey program. We have discovered 18 Roman shipwrecks with cargo, including amphora, and more than 10 anchors from different time periods.

There will be a minimum of **7 immersions** focusing on underwater archaeological survey, exploring the Ancient Port of Sanitja and the coast of the Cape of Cavalleria. The aim of this project is to identify structures of the Roman city of Sanisera and underwater shipwrecks, as well as the associated cargo including amphora and anchors.

The port of Sanitja was not only occupied by Romans. There are also ruins of a Muslim mosque and an English defense tower which lead us to believe that we could find other vessels from these time periods. During the last years of survey, several anchors and three shipwrecks from the XVI-XIX centuries were discovered.

During the course we will register archaeological materials (amphora, anchors, fine tableware) using pictures and following the standard photogrammetry procedures, afterwards we will learn to handle the information in order to create 3D graphic models using **Agisoft PhotoScan Professional** software.

Students will also attend lectures on Roman shipwrecks, Roman amphora, Mediterranean shipbuilding techniques and handling of software Agisoft PhotoScan.

Time dedicated to this part of the program: 50%.

Part 2. Tools and drawing techniques, photography and digital illustration

In the second part the students will practice the techniques that are used in an archaeological laboratory so that they can register the main objects found on a site with the highest quality. The development of those techniques will help us to obtain drawings, photographs and digital archives that will be extremely useful for the elaboration of publications, reports or further studies.

Time dedicated to this part of the program: 50%.

2. What you will learn

2.1. In the Fieldwork:

- How to survey and which **archaeological techniques** are used.
- Use and handling of the **tools** that are used during the **survey process**.
- **Recording data** obtained during the survey.
- **Objects photo-taking using photogrammetry standards.**
- Practice in the **recognition of archaeological materials and Roman finds from the II century B. C. to VI A. D.**

2.2. In the Laboratory

- **Recording data** obtained during the survey -diary and systematic methodology sheets-.
- Study and **typological classification of archaeological Roman objects** discovered during the underwater survey.
- **Relative dating** based on the classification of the archaeological objects discovered during the survey.
- Handling of the pictures from the objects in order to prepare them for **3D processing with Agisoft PhotoScan.**
- Learn how to **draw ceramic** according with the standards (piece orientation, diameter edge estimation, representation of the decoration and several views generation).
- Objects drawing exercises (glass, lithics, coins, bone needles).
- Correct handle of the graphic representation and **learning of different scales** 1:1, 2:1...
- General standards of composition and illumination in **photography.**
- **Photography techniques** used on little objects like coins, jewels and ceramics with decoration and epigraphy.

- Drawing and photographing with **Adobe Illustrator** and **Adobe Photoshop**
- **Drawing and vector handling** of the archaeological material with Adobe Illustrator.

2.3. Theory

- **Underwater Archaeological background** of Sanisera.
- **Ancient trade** in Sanisera and the Western Mediterranean Sea.
- **Ancient navigation.**
- **Modern sail merchant ships** (centuries 16th - 20th).
- History, archaeology, economy and culture of the **Roman civilization.**
- Introduction to the **History of the Sanisera Site.**
- **Minorcan archaeology** before the Roman conquest of the Balearic Islands.

3. Directed at

This course offered by the Sanisera Archaeology Institute is designed to teach with precision this field of research. **If you are interested in learning underwater survey techniques and methodology and apply them in a Roman port** where you will find amphora, anchors and the remains of shipwrecks, then this is a good option for you.

During this course, you will learn how to identify archaeological remains on the seabed. In the laboratory, you will learn how to classify archaeological material found and how to determine dates and methods used to determine the location and elements of the cargos from shipwrecks. Students will also gain experience in the handle of 3D images from sunken objects.

If you are interested in underwater archaeology, classification of archaeological material from the Roman world as well as how to process this information using technical drawing, photography and digital illustration then this is the course you are looking for. This course accommodates participants with or without previous experience.

Learn how to excavate is the most important thing for a student who wants to become a professional archaeologist, however during the last years we have noticed that both the archaeological investigation projects and the archaeological management projects are becoming more demanding and strict with the information gathering that take place in an excavation.

Due to current needs of the archaeology world the archaeologist must acquire more experience and knowledge in the laboratory. It's basic to catalogue all the material from the excavation efficiently and effectively by elaborating drawings, photographs and digital documentation that allow us to develop a rigorous research, for that reason the use of an appropriate image software has become essential for the elaboration of any report, study or publication.

This course takes place on a Mediterranean island, among a pristine and unique landscape, surrounded by the sea.

Previous knowledge or experience in archaeology is not required.

4. Field School life & language

The fieldwork runs seven hours per day. The day will be divided between diving in the Roman Port of Sanitja, lab work learning mapping techniques, exercises, lectures, videos and excursions. For every seven course days there are two days off. The course is taught in English and Spanish.

5. Diving certificate

To participate in diving activities, it is necessary to have a diving certificate from an internationally recognized organization (i.e. PADI) that will allow you to dive up to 18 meters in depth.

If you want to participate in the underwater archaeology course and don't have the Open Water Diving certificate allowing you to dive up to 18 meters, no worries! We offer you the possibility of getting the title with our Diving Center collaborator. For only \$225 extra you will be able to dive anywhere in the world.

6. Medical Check

On the first day of the course, participants have to show a medical document stating that he/she is fit for diving activities. Participants that do not have this document on the first day will not be allowed to participate until they are able to present this document.

7. Certificates

At the end of the Program students will receive a certificate of participation stating the hours and activities of the course.

Participants that perform exceedingly well in the course may receive a letter of recommendation from our organization up on request.

8. Sessions & Cost

Sessions	Dates	Cost
Session #1	2019 May 01 – May 16	\$ 2550
Session #2	2019 May 19 – June 03	\$ 2550
Session #3	2019 June 06 – June 21	\$ 2550
Session #4	2019 June 26 – July 11	\$ 2550
Session #5	2019 July 14 – July 29	\$ 2550
Session #6	2019 August 01 – August 16	\$ 2550

9. Course fee includes

- Accommodation in the Student Residency in Ciutadella. Two to six per room.
- Walking distance to the historic center, port and beaches.
- Drawing material and photographic gear.
- Course tuition.
- Learning of Agisoft PhotoScan software.
- A complete set of diving equipment: wetsuit, jacket, mask, fins, diving booties,

- tanks and weights.
- Daily transportation to/from the archaeological fieldwork.
- Breakfast, lunch and dinner.
- Accident insurance at the site.
- In case of needing to process Schengen Visa the mandatory letter of invitation will be written so you can travel and participate in our courses.
- Certificate of participation

Airfare not included from the student home to/from Menorca (Spain).

Open Water Diving certificate (PADI) not included in the course fee. You can get the certificate with our Diving Center collaborator for only \$225. (contact us for further information at sanisera@arrakis.es)

10. Spaces available

The course is limited to 5 participants per session. Reservations are only effective when payment of the registration fee is received. If for any reason the course is cancelled, payment is returned according to the field school refund policy.

11. Information and reservations

For more information, contact:

Email: info@archaeology.institute

Web page: www.archaeology.institute