



Underwater Archaeology in Sanitja harbor & Dig in the Roman city of Sanisera
(Menorca, Spain)

1. General Information

The Sanisera Archaeology Institute for International Field Schools offers annual programs in archaeology. This course is designed for students from around the world interested in studying abroad, gaining knowledge in Roman cities, classical archaeology and underwater archaeology.

The Sanisera Archaeology Institute offers a new course consisting of three main parts: underwater archaeology, photogrammetry with Agisoft PhotoScan 3D and archeological fieldwork in the city of Sanisera.

The ancient Roman city of Sanisera is located on a natural harbor. For this reason, we are lucky that the land excavations and the underwater activities take place in the same area, allowing us to develop projects in the terrestrial and marine environment, using different methodologies and techniques with a great team of professionals and experts.

The course lasts 16 days and will be divided into two different periods. The first eight days will be dedicated to underwater archaeology activities while the rest of the course will be focused on everything that is related to a land excavation.

Part 1: Explore the Ancient Roman Port of Sanitja (Menorca, Spain)

There will be a minimum of **7 hours diving** 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 amphorae 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.

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 amphorae, and more than 10 anchors from different time periods.

Course time dedicated: 45%.

Part 2. Record underwater archaeological objects using photogrammetry with Agisoft PhotoScan 3D

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.

Course time dedicated: 5%.

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

Part 3. Digging in the roman city of Sanisera

The research is focused on the **archaeological excavation of Sanisera** and it studies what happened in this Roman port connected to the maritime traffic that sailed the Mediterranean during those times. As a result, we know that **this is a very interesting archaeological site**, with abundant findings of multiple artifacts that will help us to reconstruct its past.

The excavation at the Roman city of Sanisera provides all the archaeological documentation necessary for the student to acquire enough training and experience in **all aspects involving an excavation of the Roman civilization from the II century B.C. to the VI A.D.**

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

2. What you will learn

In the Fieldwork

- How **archaeological techniques** are used.
- Use and handling of the **tools** that are used during the **fieldwork process**.
- Basic principles of stratigraphy.
- **Recording data** obtained.
- **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.**

In the Laboratory

- Recording data obtained -diary and systematic methodology sheets-.
- Study and typological classification of archaeological Roman objects discovered .
- Study and typological classification of archaeological objects of Roman archaeology: ceramics, numismatics, faunal remains, metals and glass.
- Relative dating based on the classification of archaeological objects discovered in stratigraphic sequence.
- Handling of the pictures from the objects in order to prepare them for 3D processing with Agisoft PhotoScan.

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 amphorae, 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.

After finishing this course, the training and experience gained will help you to decide if underwater archaeology is the area of research that you wish to focus on or if you want to continue on with underwater archaeology as a future profession.

The water is very clear in Menorca, with an astonishing visibility, often up to 18 to 20 meters. The water is calm and mild in temperature and current, allowing for excellent diving conditions in a natural and pristine Mediterranean atmosphere.

Also, **you can learn from the beginning** excavation techniques and methodology. During the excavation, you will find archaeological remains from the classical period including Roman pottery, amphorae, glass, etc. that you will learn how to identify in the laboratory.

Previous knowledge or experience in archaeology or computer systems is not required.

4. Field School Life & Language

The course runs six hours per day. The day will be divided between diving in the Roman Port of Sanitja, lab work, exercises, lectures and videos. 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.

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 \$400 extra you will be able to dive anywhere in the world.

6. Medical Check

On the first day of the course, participants must 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 Field 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 upon request.

8. Sessions & Cost

Sessions	Dates	Cost
Session #1	2020 May 01 – May 16	\$ 1200
Session #2	2020 May 19 – June 03	\$ 1450
Session #3	2020 June 06 – June 21	\$ 1550
Session #4	2020 June 26 – July 11	\$ 1550
Session #5	2020 July 14 – July 29	\$ 1550
Session #6	2020 August 01 – August 16	\$ 1450
Session #7	2020 August 19 – September 03	\$ 1450
Session #8	2020 September 06 – September 21	\$ 1300
Session #9	2020 September 24 – October 09	\$ 1200
Session #10	2020 October 12 – October 27	\$ 1200

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.
- 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 \$400. (contact us for further information at info@archaeology.institute)

10. Spaces Available

The course is limited to 8 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