

### **Discover Amphora & Shipwrecks in the Underwater Port of Sanitja & GIS Applied in Archaeology** (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 underwater archaeology and mapping tools applied to an archaeological recording system with GIS (Geographic Information System).**

This program is divided in two main parts:

During the first part of the course, students will gain experience in underwater archaeology focused on exploring the Ancient Roman 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 anchors and amphora related to those shipwrecks and their cargo.

During the second part of the course, students will learn how to create a GIS platform applied to underwater archaeology.

#### **Part 1. Explore the Ancient Roman Port of Sanitja (Menorca, Spain)**

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.

There will be a minimum of 8 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 amphoras 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.

This course includes classes on methodology as well as techniques and tools used in underwater archaeological survey. Students will also attend lectures on Roman shipwrecks, Roman amphorae and Mediterranean shipbuilding techniques.

*Course time dedicated: 50%.*

## **Part 2. Creating an Archaeological GIS Platform**

Students will **create an archaeological GIS platform** from the applied recording system of the underwater remains of Sanisera in the port of Sanitja, gaining experience in ARCGIS software.

*Course time: 50%.*

### **2. What you will learn**

#### ***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.
- 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 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.
- Learning, handling and practices with ArcGIS software.
- Design, preparation and management of archaeological information in a GIS platform using ArcGIS.

#### ***Theory***

- Underwater Archaeological background of Sanisera.
- Ancient trade in Sanisera and the Western Mediterranean Sea.
- Ancient navigation on the Western Mediterranean Sea.
- Modern sail merchant ships (centuries 16th - 20th).

### **3. Directed at**

**If you are interested in underwater archaeology, learning about the classification of amphoras and shipwrecks while participating in an underwater archaeological survey conducted in the port of Sanitja and then applying the collected data to GIS software**, then this is the best course for you.

This is a general course that focuses on underwater archaeological survey and the software used to record information from the archaeological survey. After a

week of surveying the port of Sanitja, participants will then use ARGIS software to enter in the data recovered during fieldwork hours.

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.

Previous knowledge or experience in archaeology is not required.

#### **4. Field School life & language**

The first half of the course focuses on underwater survey in the port of Sanitja. The course runs six hours per day. The day will be divided between diving, lab work, exercises, lectures and videos.

During the second half, participants will create an underwater archaeological GIS platform from the applied recording system of the Ancient Port of Sanitja, using ARCGIS software.

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 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	2019   May 19 – June 03	\$ 2400
Session #2	2019   June 06 – June 21	\$ 2400
Session #3	2019   June 26 – July 11	\$ 2400
Session #4	2019   July 14 – July 29	\$ 2400

Course fee includes:

- Course tuition.
- A complete set of diving equipment: wetsuit, jacket, mask, fins, diving booties, tanks and weights.
- Open water diving certificate (PADI) for those in group # 1.
- Accident insurance at the site.
- Mapping Software: ARCGIS
- Accommodation in the Student Residency in Ciutadella. Two to six per room.
- Walking distance to the historic center, port and beaches.
- Breakfast, lunch and dinner.
- Daily transportation to/from the archaeological fieldwork.
- 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](mailto:sanisera@arrakis.es) )**

## 9. 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.

## 10. Information and Reservations

For more information, contact:

Email: [info@archaeology.institute](mailto:info@archaeology.institute)

Web page: [www.archaeology.institute](http://www.archaeology.institute)