

SUSTAINABLE DEVELOPMENT IN MARINE ENVIRONMENTS

BOOTCAMP in La Ciotat
from June 25th to July 8th 2023

How are marine environments impacted by climate change? What human activities are putting pressure on marine ecosystems? How can we work as a society towards a more sustainable future for marine and coastal environments? By joining this Bootcamp, you will have the opportunity to work on those challenging questions in La Ciotat, a town located on the scenic Mediterranean French Coast. You will gain a profound overview of marine sustainability, from going on boat trips and scuba diving excursions in the Calanques national park to doing scientific measurements and participating in conferences given by oceanographers. You will create a videoclip project to share your new insights and discoveries. During the two weeks you will also visit some of the most spectacular sites of the Provence Region such as the cities of Marseilles and Arles and their museums which offer perspectives on past and present relationships between humans and the Mediterranean Sea.



Transportation, Accommodation and Food

Transportation will be provided in mini vans to and from Marignane airport and between visit sites.

Accommodation will be in double rooms with two single beds. Breakfast is included.

Meals will vary from day to day with lunch and dinner provided.



WHAT YOU WILL LEARN :

Climate Change and Marine Environments

You will learn how climate change impacts marine environments and the consequences of human activity on these ecosystems. The natural environment of La Ciotat with the Mediterranean sea and the famous Calanques is an ideal setting to explore such concepts.



Sustainable Development in Marine Environments

Learn about the main aspects of sustainable development in marine environments. Saving the Mediterranean Sea and its marine biodiversity as well as maintaining a healthy relationship between humans and the environment is critical to the health of people and our planet. The continuous deterioration of coastal waters owing to pollution, to the increase in water temperature and to sea water acidification is a reality.

Marine Pollution and Waste Treatment

Collecting and sorting waste on the La Ciotat Harbor, beaches and Calanques will be an opportunity for you to question the impact of human activities and our negligence around this rare and fragile natural environment.



Marine Spatial Planning (MSP)

You will learn about MSP, a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process.

The notion of climate justice will be presented and we will insist on human, corporate and governmental responsibilities and the actions undertaken by all to improve the situation.



Scientific Measurements with the Mediterranean Institute of Oceanography (MIO)

Measuring different physico-chemical and biological parameters thanks to the MIO boat and its scientific equipment will allow you to better grasp the precision and complexity of scientific marine research.



VISITS AND ACTIVITIES :

Numerous visits and activities related to the topic of sustainable development in marine environments will enhance your learning experience.

For example, a first scuba dive will give you a hands-on experience on the state of marine biodiversity next to La Ciotat. A boat trip on our brand new electrical boat will allow you to see the coast from a different viewpoint. Visiting a waste water treatment plant in La Ciotat or Marseilles will make you understand the complexity of the issues related to preserving the environment from the pressure of human waste. Visiting the Calanques by foot and by boat should make you love this typical Mediterranean coastal landscape. A visit of the La Ciotat Shipyard with a former student will help you understand how this La Ciotat hallmark has changed through history and evolving economic circumstances.

The MUCEM in Marseilles and the Musée de L'Arles Antique in Arles

The permanent and temporary exhibitions in these two museums will highlight different specificities of our natural, social and cultural Mediterranean environment and how they have changed throughout the centuries.

PRODUCING YOUR OWN VIDEO CLIP

This group project will be the final outcome of your work during these two weeks. You will be coached by students from the SATIS (Sciences Arts and Techniques of Image and Sound) school and by an audio-visual professional. Your video should reflect what you have learnt and discovered during this bootcamp.



The Frank Gehry LUMA foundation in Arles

This brand new architectural jewel opened in June 2022 is a witness to the blending of modernity and tradition in the antique city of Arles well known for its world-renowned photography festival and its architectural heritage from Antiquity.

Spotlight on The Cosquer Cave Reconstruction

The Reconstruction of the famous underwater Cosquer sea cave will allow us to see prehistoric paintings and to better understand the changes in landscapes, biodiversity and human activities in the Calanques of the Marseilles region. The current sea level rise endangers the real Cosquer cave which might disappear in the future. We risk losing rare paleolitical paintings and traces of our early ancestors. This reconstitution will preserve a version of our unique heritage.



	SUNDAY 25th JUNE	MONDAY 26th JUNE	TUESDAY 27th JUNE	WEDNESDAY 28th JUNE	THURSDAY 29th JUNE	FRIDAY 30th JUNE	SAT. 1st JULY
9h00 12h00	 <p>Changes to the schedule might occur due to unforeseen circumstances.</p>	Welcome for the students. Presentation of the program. Students introduce themselves. Practical details. Visit of the campus.	Conference by Sandrine RUITTON (assistant professor) on marine environments and the pressure human activities apply to this environment. The impact of climate change.	<u>MARSEILLES ALL DAY</u> The fishermen at the Vieux Port. Notre-Dame de la Garde. Visiting the reconstruction of the Cosquer Cave.	Conference on the main concepts related to Sustainable Development by Sandrine RUITTON.	Conference on Marine Spatial Planning by Federico FABBRI (PhD student). Maritime Regulations by Anne CADORET (assistant professor).	<u>ARLES ALL DAY</u> Visiting the Musée de l'Arles Antique, guided tour. Visiting the city of Arles and its numerous monuments. Café Van Gogh and Place du Forum.
13h30 16h30 or later	Arrival and Check-in at the Hotel in La Ciotat.	Pedagogical activities around a Climate Fresco.	Presentation of the students' group project : creating a video clip on a subject related to the protection of marine environments.	Visiting the MUCEM. Free time to go shopping or to visit the city.	Visiting by foot the Mugel Park in the Calanques. Observing the geology and the plants.	Trying scuba diving or snorkeling with a club in La Ciotat.	Guided Tour of the brand new Frank Gerhy LUMA foundation (opened in June 2022).
	SUNDAY 2nd JULY	MONDAY 3rd JULY	TUESDAY 4th JULY	WEDNESDAY 5th JULY	THURSDAY 6th JULY	FRIDAY 7th JULY	SATURDAY 8th JULY
9h00 12h00	Do as you wish Day. Going to the beach, visiting La Ciotat, going to the «Ile Verte» by boat.	Updates on the Video-Clip project Working with students from the SATIS school (school on audio-visual techniques).	<u>MARSEILLES ALL DAY</u> A trip on the MIO (Marine Institute of Oceanology) boat: working on different scientific measurements.	Waste management and recycling. Picking waste on the shores, sorting them, understanding their origins. Talking to SurfRider foundation or AssoTerreMer.	Finishing video projects.	Presentation of the video projects in front of an audience (teachers, colleagues, Town Hall representatives, students from other schools).	Trip to Aix-en-Provence Visiting and shopping.
13h30 16h30 or later	A hike to the Sainte Baume forest. Trip in our new electric boat.	A one-hour presentation on the Calanques national park. Working on the video with Hubert Bataille (multimedia manager at IRD) Visiting a vineyard and wine tasting in Cassis.	Visit of the MIO Laboratory. Talking with marine researchers of the MIO. Visit of the Marégraphe.	Visit of a Waste Treatment Plant in La Ciotat or Marseilles with Coraline MATTEI (temporary assistant professor).	 <p>Boat trip to the Calanques. Visit to the La Ciotat shipyard with a former student of the IUT.</p>	Exchanging with employees from the Parc des Calanques, the La Ciotat Town Hall and the MIO.	Going back to Marignane.

