## Summer School "ManGrowth - Preservation of Ecosystems for Sustainable Development"

Sapienza - University of Rome, in collaboration with Eduardo Mondlane University, launches the second edition of the Intensive Summer School Course "ManGrowth - Preservation of Ecosystems for Sustainable Development". The course is promoted and funded by the Italian Agency for Development Cooperation, as part of the Project "ManGrowth - Preservation of Ecosystems for Sustainable Development - AID 12342".

The course is focused on the importance of mangrove forests as an essential ecosystem to promote the sustainable development of coastal areas, the mitigation of the effects of climate change, and the conservation of animal and plant species linked to them by their life cycle.

The course aims to provide a broad and in-depth understanding of the mangrove ecosystem, addressing aspects of biodiversity, ecology, ecosystem services, and the sustainable use of these ecosystems, as well as the effects they experience of climate change and the challenge for their conservation. Students will acquire the technical skills to monitor and assess the conservation status of mangrove forests and their biodiversity. They will also develop a critical and cognitive background for the design and implementation of mangrove ecosystem management and restoration programmes.

During the intensive course, the study of the physical and biological characteristics of mangrove forests will be addressed, covering aspects of diversity, distribution, structure, conservation status, and mangroves at the global level. The ecology of the mangrove forests of Mozambique, the second largest mangrove forest country in Africa after Nigeria, will be studied in greater detail. In Mozambique, these valuable ecosystems cover some 300,000 hectares along the more than 2,700 kilometres of coastline washed by the Indian Ocean.

As a crucial habitat for various animal and plant species, mangroves are home to a diverse biodiversity. The biological communities that inhabit mangrove forests along the Mozambican coastline will be studied in depth, assessing the conservation status and threats to arthropods and estuarine fish, as well as terrestrial vertebrates present in the ecosystem.

The multiplicity of ecosystem services associated with mangroves will then be addressed: from climate change mitigation to coastal erosion control, to the economic and social benefits associated with mangrove forests. The ecosystem services of mangrove forests are an irreplaceable resource for the livelihoods and sustainable development of millions of people: worldwide, it is estimated that at least 120 million people live in close contact with these ecosystems, while in Mozambique, around 60 percent of the population lives in low-lying coastal areas in close contact with mangroves.

Finally, given the many threats to these ecosystems, methods of restoration, and conservation of Mozambican mangroves will be addressed. Knowledge of modern tools for monitoring, assessment, and data analysis of vegetation, reforestation procedures, and the implementation of ecological restoration programs will then be provided.

The course will consist of lectures, given by international researchers and experts, and field activities to apply the knowledge acquired and experiment with the collection of data useful for assessing the conservation status of mangroves. This part of the course will take place at the Marine Biology Station on Inhaca Island in Maputo Bay (Mozambique). Laboratory activities for soil analyses of samples collected in the field are also planned. This part of the course will take place at the Eduardo Mondlane University.

Classes will begin on 30 September 2024 and will end on 26 October 2024, as reported in the Course Programme.

The training activity amounts to a total of 190 hours, of which at least 90 hours will be dedicated to frontal teaching activities and 100 to laboratories, exercises, and professional training.

The course is structured in thematic modules. The lectures include frontal teaching sessions and practical activities for all students. Work projects will be carried out for each module. The development of such work projects will be organised in groups. Each group, led by reference professors, will have to submit a final project report, and will have to make an oral presentation, which may be filmed and uploaded to our YouTube channel.

Travel costs to reach the course locations (Eduardo Mondlane University in Maputo; Inhaca Island Marine Biology Station), food, and accommodation will be covered by the project "ManGrowth - Preservation of Ecosystems for Sustainable Development" with the support of the Italian Agency for Development Cooperation.

Participation to the course is free of charge. The enrolment fee grant will be paid by the project "ManGrowth

- Preservation of Ecosystems for Sustainable Development" with the support of the Italian Agency for

Development Cooperation communicated directly by the course secretariat to the admitted participants.

For any information, the course secretariat is available at mangrowthcourse.dba@uniroma1.it

## Course program:

https://www.uniroma1.it/sites/default/files/programma\_didattico\_summer\_school\_mangrowth\_2024.pdf

## Call for Applications:

https://drive.google.com/file/d/1iAmkoR-aP Cy3xk-zIFNQPy-iPu i47u/view?usp=sharing

To apply, please send the completed application form (*Attached 1 of Call for Application*) to the course secretariat email address: mangrowthcourse.dba@uniroma1.it

Note: Enclose (1) a copy of your Passport, (2) your degree certificate, (3) your CV, (4) and a short video presentation in English (max 2 min). In the video, the candidate must briefly explain their background and the reasons for attending the Summer School.

Here are the Guidelines for registration to Sapienza Infostud (<a href="https://drive.google.com/file/d/140PFb">https://drive.google.com/file/d/140PFb</a> VY52-7SQJumEedfbSVE3FrMyBl/view?usp=sharing "Instruction to register on Infostud Sapienza website")

The deadline to apply is 01 July 2024, 00:00 (midnight) GMT+2