

Restoration of Hard Bottoms and Tropical Reefs: Field Work and Practice (C004390)

Due to Covid 19, the education and assessment methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size *(nominal values; actual values may depend on programme)*

Credits 6.0

Study time 150 h

Contact hrs

48.0h

Course offerings in academic year 2021-2022

A (semester 1)

English

Gent

Lecturers in academic year 2021-2022

Cerrano, Carlo

ANCONA01 lecturer-in-charge

Coppari, Martina

ANCONA01 co-lecturer

Offered in the following programmes in 2021-2022

crdts

offering

[International Master of Science in Marine Biological Resources](#)

6

A

Teaching languages

English

Keywords

Degraded marine habitats, habitat loss, hard bottoms, tropical reefs, restoration tools

Position of the course

Direct and indirect human pressures on marine ecosystems are expected to increase considerably in the next few decades, leading to a serious loss of marine biodiversity and the degradation of ecosystem functioning. Since the functioning of marine ecosystems is upheld by high levels of biodiversity, the continuing loss of biodiversity will lead to the unprecedented erosion of natural capital in marine ecosystems and of the services they supply. The course aims primarily to provide students strategies and practical skills for the restoration of hard bottom habitats, for the assessment of restoration success and benefits on key ecological attributes. This course will provide suitable restoration field protocols for the selected habitats/species.

Contents

- General introduction on restoration actions of hard bottoms habitats
- Criteria for selection of target species
- Restoration donor sites and specimens
- Selection of restoration site
- Restoration protocols (Techniques) for coralligenous
- Protocols for sponges
- Protocols for corals
- Tools for assessing restoration success of transplanted organisms and their ecological benefits on the surrounding environment

Initial competences

Good knowledge on marine zoology, ecology and biology. SCUBA diving licence is useful, but not mandatory

Final competences

- 1 Knowledge on the most suitable strategies for restoring degraded hard bottoms and reef habitats.
- 2 Knowledge on the best restoration techniques to be applied in the field.
- 3 Knowledge on the strategies for the monitoring of the success of restoration actions.
- 4 Knowledge on implementation plans for the scale up of restoration actions.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Demonstration, Group work, Excursion, Lecture, Integration seminar

Learning materials and price**References****Course content-related study coaching****Assessment moments**

end-of-term assessment

Examination methods in case of periodic assessment during the first examination period

Written examination with multiple choice questions, Written examination with open questions

Examination methods in case of periodic assessment during the second examination period

Written examination with multiple choice questions, Written examination with open questions

Examination methods in case of permanent assessment**Possibilities of retake in case of permanent assessment**

not applicable

Extra information on the examination methods

The final examination consists of a multiple-choice test open questions-response. The students must demonstrate that they have acquired the basic knowledge presented during the course; with regard to the practical part, the student will be asked to conceptually apply the methods learned in the field to specific case studies.

Calculation of the examination mark

The maximum final mark is 30/30. 5 open questions will receive a maximum score of 2 for a total of 10 points. 20 multiple choice questions will count 1 score each for a total of 20.