GHENT UNIVERSITY

Course Specifications

From the academic year 2021-2022 up to and including the academic year

Restoration of Seagrasses and Algal Forests: Field Work and Practice (C004389)

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

Rindi, Fabio	ANCONA01	lecturer-in-charge
Bianchelli, Silvia	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 vegetated marine habitats, seagrasses and algal forest, restoration tools

Position of the course

Seagrass meadows and algal forests are highly productive systems and play a key role in the provisioning of ecosystem's goods and services Due to their ecological role, seagrass meadows and algal forests are protected under different directives and international conventions. However, protection alone can be insufficient to reverse their progressive degradation due to the increased human-driven pressures so that restoration actions are urgently required based on the best scientific knowledge. This course aims to analyse the role of restoration actions as possible tool to face the rapid loss of these systems. Particular emphasis will be due to provide students with practical skills for restoring degraded vegetated marine habitats and for the assessment of restoration success through field and laboratory works.

Contents

- General introduction on the ecological role of seagrasses and algal forests and on main factors causing their degradation and loss
- Case studies on restoration actions of vegetated marine habitats
- Criteria for the selection of donor sites
- Selection of restoration sites
- Restoration protocols (techniques) for seagrasses
- Restoration protocols for algal forests
- Criteria and tools for assessing restoration success of transplanted organisms and their ecological benefits on the surrounding environment

Initial competences

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

Final competences

1 Knowledge on the most suitable strategies for restoring degraded vegetated marine 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

Notes taken during the lecturers and power point presentations handed out by the lecturers. State of the art articles, reports, books shared by the lecturer.

References

Course content-related study coaching

No course 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.