

# COASTAL AND MARINE BIOLOGY AND ECOLOGY (LM51)

(Lecce - Università degli Studi)

## Teaching PLANT BIODIVERSITY

GenCod A006028

**Owner professor** Vincenzo

**Teaching in italian** PLANT BIODIVERSITY

**Teaching** PLANT BIODIVERSITY

**SSD code** BIO/02

**Reference course** COASTAL AND MARINE BIOLOGY AND ECOLOGY

**Course type** Laurea Magistrale

**Credits** 6.0

**Teaching hours** Front activity hours: 48.0

**For enrolled in** 2023/2024

**Taught in** 2023/2024

**Course year** 1

**Language** ENGLISH

**Curriculum** Curriculum E-Biodiversity and Ecosystem Sciences

**Location** Lecce

**Semester** Second Semester

**Exam type** Oral

**Assessment** Final grade

**Course timetable**

<https://easyroom.unisalento.it/Orario>

## BRIEF COURSE DESCRIPTION

The course is borrowed from the first part of course of BIODIVERSITY OF COASTAL AND MARINE VEGETATION

The course covers the following topics.

1. Coastal environment
2. Flora of coastal dune
3. Flora of rocky coast
4. Flora of coastal cliff
5. Multivariate analysis of data
6. Data transformation
7. Similarity and distance functions
8. Classification methods
9. Ordination methods
10. Software GINKGO

## REQUIREMENTS

Knowledge about plant taxonomy and general concepts of ecology and statistics

## COURSE AIMS

The course achieves the following objectives

1. To provide students with general information about coastal plants
2. To be able to identify coastal plants
3. To be able to collect and sample data about coastal vegetation
4. To introduce students to the use of a multivariate analysis software (GINKGO produced by the Department of Vegetal Biology, University of Barcelona)
5. To analyse collected data about coastal vegetation by a multivariate approach

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#### TEACHING METHODOLOGY

This is a lecture-lab course in which topics are presented by the teacher in classroom, laboratory and on the field. Field trips to gather plant specimens and data on spatial pattern of vegetation in coastal ecosystems and computer labs are very important to acquire a knowledge and technical abilities based on collaborative and cooperative learning. Indeed students interact with each other and the teacher during the instructional sessions.

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#### ASSESSMENT TYPE

By student group presentation on topics related to the course and testing the ability of single student to use the multivariate analysis software

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#### REFERENCE TEXT BOOKS

Notes of lectures (available on Microsoft Teams)  
Further reading

Orlóci, L., 2013. *Multivariate analysis in vegetation research*. Springer.

Orlóci, L., Kenkel, N.C. and Orlóci, M., 1987. Data analysis in population and community ecology. *Department of Plant Sciences, the University of Western Ontario, London, Canada*

Pielou, E.C., 1984. *The interpretation of ecological data: a primer on classification and ordination*. John Wiley & Sons.

Wildi, O., 2017. *Data analysis in vegetation ecology*. Cabi.