

COASTAL AND MARINE BIOLOGY AND ECOLOGY (LM51)

(Lecce - Università degli Studi)

Teaching LABORATORY OF ECOLOGICAL INFORMATICS

GenCod A006034

Owner professor GIORGIO MANCINELLI

Reference professors for teaching
FRANCESCO COZZOLI, GIORGIO MANCINELLI

Teaching in italian LABORATORY OF ECOLOGICAL INFORMATICS

Teaching LABORATORY OF ECOLOGICAL INFORMATICS **Language** ENGLISH

SSD code BIO/07

Reference course COASTAL AND MARINE BIOLOGY AND ECOLOGY

Course type Laurea Magistrale

Credits 10.0

Teaching hours Front activity hours: 80.0

For enrolled in 2021/2022

Taught in 2022/2023

Course year 2

Curriculum Curriculum E-Biodiversity and Ecosystem Sciences

Location Lecce

Semester First Semester

Exam type Oral

Assessment Final grade

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

BRIEF COURSE DESCRIPTION

The course activities are based on the use of the R language to access, format, analyze, and visualize ecological data and the integration between R and Markdown for the visualization of scientific reports

REQUIREMENTS

Fundamentals of ecology; Basic computer knowledge; Basic statistical knowledge

COURSE AIMS

Practical laboratory course introducing and implementing the use of IT tools for the analysis and representation of ecological data.

TEACHING METHODOLOGY

Laboratory activities during which the students will be tutored in the use of R codes provided by the lecturer

ASSESSMENT TYPE

Final exam consisting in the creation of IT tools for the analysis and visualization of ecological data

FULL SYLLABUS

Download of an ecological dataset from an online repository; data import/export in .CSV and in other common formats; data visualization using basic and advanced graphical tools in R; data augmentation by integration with information from online repositories such as FishBase; data geo-referencing and implementation of the dataset within a GIS-based context; univariate statistical analysis and introduction to exploratory multivariate approaches; use of Markdown for the creation and visualization of a scientific report

REFERENCE TEXT BOOKS

No specific textbooks are required