

COASTAL AND MARINE BIOLOGY AND ECOLOGY (LM51R)

(Lecce - Università degli Studi)

Teaching MARINE BIOLOGY

GenCod A005724

Owner professor SERGIO ROSSI

Teaching in italian MARINE BIOLOGY

Teaching MARINE BIOLOGY

SSD code BIO/05

Reference course COASTAL AND MARINE BIOLOGY AND ECOLOGY

Course type Laurea Magistrale

Credits 6.0

Teaching hours Front activity hours: 50.0

For enrolled in 2025/2026

Taught in 2025/2026

Course year 1

Language

Curriculum Curriculum Marine Biology and Ecology

Location Lecce

Semester First Semester

Exam type

Assessment

Course timetable

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

BRIEF COURSE DESCRIPTION

The course starts with the description of basic concepts about geology, physics, chemistry and biology of the oceans. Once the different zonation, depending on light availability and depth range, are described, the different benthic habitats (from supralittoral to the hadal zone) are explained with examples of different areas of the planet. The main threats and impacts in each are also introduced.

REQUIREMENTS

Knowledge in geology, botanics, zoology and ecology

COURSE AIMS

This course is a general introduction to marine biology and ecology. Basic concepts of zonation, habitat description or environmental parameters are explained with examples. The student will follow a roadmap to better apply concepts of ecology and biology, having the possibility to overview different areas of the world. From Polar systems to Mediterranean habitats, the final target is explore the basic knowledge that will be essential for the follow-up of the rest of the courses.

TEACHING METHODOLOGY

Lectures, seminars and practical work on marine biology.

ASSESSMENT TYPE

Oral exam with 5-6 different questions about the lectures

FULL SYLLABUS

THE BLUE PLANET TRANSFORMATION. HISTORICAL ECOLOGY. GEOMORPHOLOGY. OCEAN ZONATION. WATER COLUMN PROPERTIES. SEDIMENTS. CIRCULATION PRIMARY AND SECONDARY PRODUCTIVITY. THE MEDITERRANEAN SEA. ZONATION OF BENTHIC COMMUNITIES. LITTORAL BENTHOS. SUBLITTORAL BENTHOS. SEAGRASSES. CORALLIGENOUS AND MAËRL. SUBLITTORAL BENTHOS-Soft bottoms. CORAL REEFS. MESOPHOTIC CORAL REEFS. MARGINAL REEFS. MANGROVES. KELP FORESTS. ESTUARIES AND DELTAS. DEEP-SEA BENTHOS. COLD WATER CORALS. HYDROTHERMAL VENTS. POLAR ECOSYSTEMS. SUBMARINE CAVES. GENERAL IMPACTS. OVERVIEW OF THE METHODS IN MARINE BIOLOGY.

REFERENCE TEXT BOOKS

Marine biology / Peter Castro, Michael E. Huber. — 7th ed. ISBN 978-0-07-302819-4