

COASTAL AND MARINE BIOLOGY AND ECOLOGY (LM51R)

(Lecce - Università degli Studi)

Teaching EVOLUTIONARY BIOLOGY

GenCod A006026

Owner professor LUIGI MUSCO

Teaching in italian EVOLUTIONARY BIOLOGY

Teaching EVOLUTIONARY 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: 52.0

For enrolled in 2025/2026

Taught in 2025/2026

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 theory of evolution is central in biology since it encompasses all its disciplines allowing to a holistic view of life and its heterogeneity. The course will start with an introduction to evolutionary theories before and after Darwin. It will include topics such as phylogenetics, and the fossil record, the history of life on Earth, biogeography, biodiversity and ecology, genetic and phenotypic variation, speciation, reproductive success, coevolution, development, and macroevolution.

REQUIREMENTS

No requirements are foreseen to attend this course, apart from basic knowledge of general biology.

COURSE AIMS

The students will pursue topics across a broad span of interconnected fields, including biogeography, ecosystem biology, community and population biology, organismal biology, molecular ecology, population genetics, genomics, speciation and macroevolution.

TEACHING METHODOLOGY

Theoretical lessons, including seminars from experts in the field, integrated by round-table sessions (JOURNAL CLUB sessions) on evolutionary biology and evolutionary ecology hot topics, and 4 practical lessons on molecular characterization of biodiversity (20 h) (6 ECTS in total, 52

ASSESSMENT TYPE

- Assessment method: Written exam with 9 multiple-choice questions + 1 open-ended question; followed by discussion with the teacher. Questions on both the theoretical and the practical lessons
- Alternative format: Upon justified request, the written exam may be replaced by a full oral exam.
- Grading: Score out of 30, with possible distinction.
- Multiple-choice: up to 3 point each
- Open question: up to 3 points
- Unanswered questions: 0 points
- Passing mark: Minimum 18/30.
- Retake policy: If failed or grade not accepted, the written exam must be retaken. After two unsuccessful attempts, the exam can only be taken orally

REFERENCE TEXT BOOKS

D. J. Futuyma. 2005. Evolution. Sinauer Associates
Slides of the lessons