

# COASTAL AND MARINE BIOLOGY AND ECOLOGY (LM51)

(Lecce - Università degli Studi)

## Teaching MARINE LIFE CYCLES

GenCod A005727

**Owner professor** Adriana GIANGRANDE

**Teaching in italian** MARINE LIFE CYCLES **Course year** 1

**Teaching** MARINE LIFE CYCLES

**Language** ENGLISH

**SSD code** BIO/05

**Curriculum** PERCORSO COMUNE

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

**Course type** Laurea Magistrale

**Location** Lecce

**Credits** 5.0

**Semester** First Semester

**Teaching hours** Front activity hours: 42.0

**Exam type**

**For enrolled in** 2019/2020

**Assessment**

**Taught in** 2019/2020

**Course timetable**

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

### BRIEF COURSE DESCRIPTION

diversity and evolution of life cycle of marine invertebrates .he knowledge of reproductive biology and diversity of larval forms is utilized to understand the evolution of life cycle and its implication in determining the invertebrate distribution and ecology

### REQUIREMENTS

Knowledge of zoology and especially on animal phylogeny and taxonomy knowledge of basical ecology rules

### COURSE AIMS

enable students to read specific paper on the topic in a critical manner, and to be able to carry out personal research on the subject treated during the course

the knowledge of reproductive biology and diversity of larval forms is utilized to understand the evolution of life cycle and its implication in determining the invertebrate distribution and ecology

### TEACHING METHODOLOGY

in addition to frontal teaching and field exercises, students actively participate by producing their own presentations of the topics and analyzing publications on the topic.

### ASSESSMENT TYPE

written and oral examination

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## FULL SYLLABUS

Description of complex life cycle in Marine invertebrates  
Larval diversity in: Basal metazoa, Bilaterian: Protostome Lophotrocozoa and Ecdisozoa;  
Deuterostome  
Case of study: molluscs, polychaetes echinoderms  
Importance of egg size and covariability of traits in marine invertebrates  
integrating functions in the evolution of life cycle  
phylogenetic constraints  
Meaning of the developmental diversity  
Evolutionary and ecological aspects  
More on larval dispersal  
life history theories  
Importance of life cycle knowledge in ecological studies  
Description of settlement and recruitment, population and community dynamics  
Supply side ecology and connectivities  
Bio-physical models  
Some examples

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## REFERENCE TEXT BOOKS

material provided by the teacher