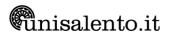
COASTAL AND MARINE BIOLOGY AND ECOLOGY (LM51)

(Lecce - Università degli Studi)

		Teaching in italian MARINE LIFE CYCLES Course year 1 AND SYMBIOTIC ASSOCIATIONS	
SYMBIOTIC ASSOCIATIONS		Teaching MARINE LIFE CYCLES AND SYMBIOTIC ASSOCIATIONS	Language ENGLISH
GenCod A006025		SSD code BIO/05	Curriculum Curriculum Marine Biology and Ecology
Owner professor Genuario BELMONTE		Reference course COASTAL AND MARINE BIOLOGY AND ECOLOGY	
		Course type Laurea Magistrale	Location Lecce
		Credits 8.0	Semester First Semester
		Teaching hours Front activity hours: 68.0	Exam type Oral
		For enrolled in 2022/2023	Assessment Final grade
		Taught in 2022/2023	Course timetable https://easyroom.unisalento.it/Orario
BRIEF COURSE DESCRIPTION	diversity of life cycles of marine invertebrates; post-embryonic development; larvae and metamorphosis; life histories. factors determining space-time dynamics of communities. evolution of life cycles and life history traits. co-evolution of species and survival strategies.		
REQUIREMENTS	Zoology, Comparative anatomy, Histology, Embryology, basic Ecology, Genetics		
COURSE AIMS	each student will be able to learn and understand: differences between life cycle stages and life history traits diversity, similarity, and uniformity of embryo and post-embryo development adaptation and conditioning in animal associations and communities in addition, it will be developed: synthesis ability in treating/communicating scientific arguments ability in planning and execution of sampling of life cycle elements in the marine environment, other than analysis of samples and data generation for statistical elaboration.		
TEACHING METHODOLOGY	frontal lessons, study and comprehension of scientific literature, practical experiences in the field		
ASSESSMENT TYPE	the examination consists of a multiple answer questionnaire on the whole program, plus an oral presentation on a single argument (selected by the student)		



FULL SYLLABUS

Diversity of Life Cycles in marine organisms, Stages and steps of development (egg, embryo, larva, juvenile, adult), intraspecific polymorphism. Fertilization (internal and external); Larvae and individual polymorphism. Life cycle and life history. Egg and Embryo development; postembryonic development (direct, indirect), larvae and metamorphosis. Ancestral condition and Metazoa evolution (the Trochaea theory). Resource utilization by different stages, reproductive strategies (sexual and asexual) and adulthood. Reproductive behaviour (mating, brooding, parental care). Life cycles of marine organisms and ecological implications (population dynamics, settlement-recruitment; pre and post-settlement events). Space-time community dynamics and assembly rules. Supply Side Ecology and Connectivity, Supply Vertical Ecology and Resurrection Ecology. Definition of closed and open communities. Metapopulation and metacommunity concepts. Factors controlling local biodiversity. Importance of biotic relationships and species associations within communities. Intra-specific and Inter-specific relationships. Individual, Species, and Community Polymorphism.

REFERENCE TEXT BOOKS

scientific articles and didactic material distributed by the teacher

