COASTAL AND MARINE BIOLOGY AND ECOLOGY (LM51)

(Lecce - Università degli Studi)

Teaching THEORETICAL ECOLOGY

GenCod A006027

Owner professor Alberto BASSET

Teaching in italian THEORETICAL ECOLOGY

Teaching THEORETICAL ECOLOGY

SSD code BIO/07

Reference course COASTAL AND MARINE BIOLOGY AND ECOLOGY

Course type Laurea Magistrale

Credits 6.0

Teaching hours Ore-Attivita-frontale: 48.0

For enrolled in 2020/2021

Taught in 2020/2021

Course year 1

Language INGLESE

Curriculum Curriculum E-Biodiversity and Ecosystem Sciences

Location Lecce

Semester Primo-Semestre

Exam type Orale

Assessment Voto-Finale

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

BRIEF COURSE DESCRIPTION	The course will start with an introduction to thermodynamic theory of ecosystems and Evolutionary theory and their integration: thermodynamic of living systems far from the equilibrium, exergy, eco-exergy and ascendency; maximum entropy theory. The course will address biodiversity theories considering all different scales of ecological interests, from individual ecology to macrosystem ecology, including spatial ecology and evolutionary one.
REQUIREMENTS	The student need to have a basic knowledge of: 1. population, community and ecosystem ecology; 2. ecological energetics; evolutionary ecology; behavioural ecology; functional ecology; 3. Organication processes; trophic transfer processes; nutrient cycling processes and biogeochemical cycles
COURSE AIMS	The course is aimed at giving to the students an overview of the main theoretical bodies in ecology and an highligh on the most recent theoretical advancement in ecological theories.
TEACHING METHODOLOGY	The teaching metodology will include frontal lectures, discussion/brainstorming sessions, thematic seminars involving national and international colleagues with outstanding theoretical research activities, practical exercitation using the LifeWatch ERICtraining platforms
ASSESSMENT TYPE	Oral dissertation on specific theoretical bodies with the aid (optional) of presentation softwares (e.g., powerpoint, keynote, prezi,...)
REFERENCE TEXT BOOKS	Theoretical Ecology: concepts and applications (Oxford University Press, 2020); A New Ecology:: system perspective (Elsevier Science, 2007)