

## Concepts and Practices in Biological Oceanography and Marine Ecology - Part 2 (C004345)

**Course size** *(nominal values; actual values may depend on programme)*

**Credits 6.0**

**Study time 150 h**

**Course offerings in academic year 2026-2027**

A (semester 2)

English

Gent

**Lecturers in academic year 2026-2027**

Orignac, Jadwiga

PARIS01

lecturer-in-charge

Lantoine, François

PARIS01

co-lecturer

**Offered in the following programmes in 2026-2027**

[International Master of Science in Marine Biological Resources](#)

**crdts**

6

**offering**

A

**Teaching languages**

English

**Keywords**

Mediterranean biodiversity, marine ecology, taxonomy, coralligenous, posidonia meadows benthic macrofauna, fish, plankton, macrophytes.

**Position of the course**

CPOB-Part 2 is a practical implementation with field work, theory acquired in the first semester. The Part-2 is devoted to the Mediterranean biodiversity. Naming the organisms is crucial to survey biodiversity and identify biodiversity hotspots. This course aims at providing the necessary tools to start studies involving taxonomy of marine organisms such as zooplankton, ichtyo-, macro-fauna as well as phytoplankton and macrophytes. The course relies on lectures, field sampling and laboratory work. It offers the opportunity to learn taxonomy, observe taxa in natural habitat and get an insight into their biology. This training- course focuses on the fauna and flora of Banyuls sur Mer Bay. The course lasts three weeks in March and takes place at the marine station at Banyuls sur Mer, France (<http://www.php.obs-banyuls.fr/>)

**Contents**

This course is primarily aimed at students willing to improve their knowledge in diversity and taxonomy of marine organisms. It is a skills-based training course in Mediterranean taxonomy. In particular, this training course will focus on the taxonomy of representative invertebrates from coralligenous, posidonia meadows and soft bottoms as well as on Mediterranean fish, plankton and macrophytes. Everyday, there will be lectures on the selected taxa followed by hands on with freshly collected samples during field expeditions. Sampled taxa will be observed under the binocular or optical microscopes at the laboratory and the taxonomic criteria will be applied to identify the organism. Moreover, a lecture session will be given with special insight into biology of studied organisms (functions of respiration, nutrition, reproduction). Then, an observation session of taxa previously collected from the area of Gulf of Lion will exemplify and illustrate morphological details of the group of interest.

**Initial competences**

Basic knowledge in marine ecology and biology

**Final competences**

1 Acquire knowledge of taxonomy and biology of main Mediterranean phyla with emphasis on the diversity of Gulf of Lion.

- 2 Develop the skills and abilities in sample handling (preparation and examination of the specimens under binocular and optical microscope) and using identification keys.

**Conditions for credit contract**

Access to this course unit via a credit contract is determined after successful competences assessment

**Conditions for exam contract**

This course unit cannot be taken via an exam contract

**Teaching methods**

Seminar, Lecture

**Extra information on the teaching methods**

Lecturer and practical work (using taxonomic keys for identification of organisms)

**Study material**

None

**References**

Brusca & Brusca 2003.- Invertebrates Sinauer Assoc.

**Course content-related study coaching****Assessment moments**

end-of-term and continuous assessment

**Examination methods in case of periodic assessment during the first examination period**

Written assessment

**Examination methods in case of periodic assessment during the second examination period**

Written assessment

**Examination methods in case of permanent assessment**

Assignment

**Possibilities of retake in case of permanent assessment**

examination during the second examination period is possible

**Extra information on the examination methods**

- Practical examination: oral presentation in a small group of students.
- Written examination: individual restitution of acquired knowledge during the lectures.

**Calculation of the examination mark**

- 60% Written Exam
- 40% Practical Assignments