Course Specifications
Valid as from the academic year 2017-2018

Marine Food Web Ecology (C004046)

Course size
Credit(s) 3.0
Study time 90 h
Contact hrs 20.0 h

Course offerings and teaching methods in academic year 2019-2020
A (semester 1) English lecture 20.0 h

Lecturers in academic year 2019-2020
De Troch, Marleen WE11 lecturer-in-charge
De Clerck, Olivier WE11 co-lecturer

Offered in the following programmes in 2019-2020
Master of Science in Marine and Lacustrine Science and Management

3 A

Teaching languages
English

Keywords
Structural biodiversity, functional biodiversity, biomarkers, primary production, plankton, benthos, marine mammals

Position of the course
Advanced course to unravel the biodiversity of aquatic higher organisms operating in crucial units of food webs. This course aims to give insight in structural and functional aspects of biodiversity and is based on knowledge of marine and lacustrine organisms and their environment (`Marine and Lacustrine Biology`).

Contents
Starting from an overall aquatic food web, the course will give: a general approach of actual research topics as
• structural biodiversity (spatial levels) and its calculation
• functional biodiversity with a more detailed approach of key players in aquatic food webs:
• primary producers: marine photosynthetic organisms (macroalgae, mangroves, seagrasses and scleractinian corals), ecological roles and ecophysiology
• zooplankton
• benthos
• top predators and marine mammals in terms of their function, their organisation and their morphological adaptations.

Initial competences
Basic knowledge of the biology of aquatic organisms (both plants and animals).

Final competences
1 To know how to calculate and interpret biodiversity.
2 To get knowledge on the morphological adaptations of aquatic organisms.
3 To understand their functioning in order to maintain aquatic biodiversity in their environments.

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

(Approved)
Teaching methods
- Lecture

Extra information on the teaching methods
- Lectures are always followed by short interactive discussion sessions.

Learning materials and price
- Cost: 20.0 EUR for syllabus, copies of research papers additional handbooks (not compulsory)

References
- Dring Matthew J. Biology of marine plants.

Course content-related study coaching

Evaluation methods
- end-of-term evaluation

Examination methods in case of periodic evaluation during the first examination period
- Oral examination

Examination methods in case of periodic evaluation during the second examination period
- Oral examination

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation
- not applicable

Extra information on the examination methods
- Oral examination with written preparation. There are typically 2-4 questions for each part (botany, zoology). The questions seek an equilibrium between knowledge and understanding.

Calculation of the examination mark
- The final score is calculated as 1/3 (De Clerck) and 2/3 (De Troch).