Course Specifications
Valid as from the academic year 2017-2018

Marine Extreme Systems (C004043)

Lecturers in academic year 2019-2020
Vanreusel, Ann
WE11 lecturer-in-charge
Van Rooij, David
WE13 co-lecturer

Course offerings and teaching methods in academic year 2019-2020
A (semester 1) English
lecture 30.0 h
self-reliant study activities 25.0 h
seminar 10.0 h

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

Teaching languages
English

Keywords
Deep-sea, margin and polar systems, ecology, geology and biogeochemistry, global change

Position of the course
Most important margin, deep-water and polar systems will be studied in an integrated way with focus on biological, geological and bio(geo)chemical processes, including ecosystem dynamics in a context of global change

Contents
Structure, origin and evolution of systems that can be found along ocean margins, the deep sea or in polar environments such as cold seeps, mud volcanoes, cold water corals, carbonate mounds, hydrothermal vents, abyssal plains and ice margins. Study of their past and present geological processes, their ecosystem functions and biodiversity, the most important environmental drivers, their exploration, exploitation, threats (including anthropogenic activities and global change) and management.

Initial competences
General knowledge of marine biological, marine geological and biochemical processes.

Final competences
1. Students have advanced knowledge and insight in the biology and geology of margin systems and extreme environments, and how they evolve over time.
2. Students have insight in the aspects of management and societal context.

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
Lecture, seminar, self-reliant study activities

Extra information on the teaching methods

(Certified)
Individual study as a preparation for the discussions based on a selection of specialised papers.

Learning materials and price
Cost: 15.0 EUR
Scientific publications from international peer-reviewed journals and specialized handbooks

References

Course content-related study coaching
During the course, students can ask questions at the end of each class or after making an appointment. At the end of the course, special sessions for answering questions can be organised. Questions can also be asked during contact moments of assignments.

Evaluation methods
end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period
Written examination with open questions

Examination methods in case of periodic evaluation during the second examination period
Written examination with open questions

Examination methods in case of permanent evaluation
Assignment

Possibilities of retake in case of permanent evaluation
not applicable

Extra information on the examination methods
In addition to the exam there is an assignment by means of interactive discussions on specified subjects from the lectures, supplemented with specialized literature.

Calculation of the examination mark
- 60% written exam
- 40% assignment