Marine Extreme Systems (C004043)

Valid as from the academic year 2017-2018

Course Specifications

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 credits offering
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

(Approved)
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