GHENT UNIVERSITY

Course Specifications

Valid in the academic year 2023-2024

Marine Extreme Systems (C004043)

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

Credits 6.0 **Study time 180 h**

Course offerings and teaching methods in academic year 2023-2024

A (semester 1)	English	Gent	lecture seminar independent work

Lecturers in academic year 2023-2024

Vanreusel, Ann	WE11	lecturer-in-charge

Offered in the following programmes in 2023-2024	**crdts**	**offering**
Master of Science in Marine and Lacustrine Science and Management	6	A

Teaching languages

English

Keywords

Deep-sea, margin and polar systems, ecology 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 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 geological features the ecological and biochemical 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 ecology 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

Seminar, Lecture, Independent work

Extra information on the teaching methods

Individual study as a preparation for the discussions based on a selection of specialised papers.
Due to COVID 19 other teaching tools may be used when needed

Learning materials and price

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.

Assessment moments

end-of-term and continuous assessment

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

Written assessment with open-ended questions

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

Written assessment with open-ended questions

Examination methods in case of permanent assessment

Assignment

Possibilities of retake in case of permanent assessment

not applicable

Extra information on the examination methods

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

Calculation of the examination mark

- 60% written exam
- 40% assignement