

## Marine Extreme Systems (C004043)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

<b>Course size</b>	<i>(nominal values; actual values may depend on programme)</i>		
<b>Credits</b> 6.0	<b>Study time</b> 180 h	<b>Contact hrs</b>	50.0 h

### Course offerings and teaching methods in academic year 2022-2023

A (semester 1)	English	Gent	seminar	10.0 h
			lecture	30.0 h
			self-reliant study activities	25.0 h

### Lecturers in academic year 2022-2023

Vanreusel, Ann	WE11	lecturer-in-charge
----------------	------	--------------------

### Offered in the following programmes in 2022-2023

<a href="#">Master of Science in Marine and Lacustrine Science and Management</a>	<b>crdts</b>	<b>offering</b>
	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

Lecture, seminar, self-reliant study activities

**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.

**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