Course Specifications
Valid as from the academic year 2017-2018

Lecturers in academic year 2019-2020

<table>
<thead>
<tr>
<th>Lecturer</th>
<th>Role</th>
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<tbody>
<tr>
<td>Vanreusel, Ann</td>
<td>WE11 lecturer-in-charge</td>
</tr>
<tr>
<td>Van Rooij, David</td>
<td>WE13 co-lecturer</td>
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Offered in the following programmes in 2019-2020

<table>
<thead>
<tr>
<th>Master of Science in Marine and Lacustrine Science and Management</th>
<th>credits</th>
<th>offering</th>
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<tbody>
<tr>
<td>6</td>
<td>A</td>
<td></td>
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Course size (nominal values; actual values may depend on programme)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
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<tr>
<td>6.0</td>
<td>180 h</td>
<td>50.0 h</td>
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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

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 biogeochemical 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

(Approved)