Integrated Field Course at Sea (C003354)

Valid as from the academic year 2016-2017

Course Specifications

Course size

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
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<tbody>
<tr>
<td>3.0</td>
<td>90 h</td>
<td>45.0 h</td>
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Course offerings and teaching methods in academic year 2017-2018

A (semester 2)
- work placement 37.5 h
- integration seminar 7.5 h

Lecturers in academic year 2017-2018

- Vanaverbeke, Jan  WE11 lecturer-in-charge
- Vanreusel, Ann  WE11 co-lecturer

Offered in the following programmes in 2017-2018

- Master of Science in Marine and Lacustrine Science and Management
- 3 credits  offering A

Teaching languages

- English

Keywords

- Field measurements, observations, lab experiments, data collection (at sea) and field knowledge

Position of the course

The main objective is to convey the philosophy behind and the main practices for conducting field work at sea, with practical hands-on introduction to the main field techniques, experimental research, data acquisition and processing. The final aim is to provide the students with an insight in ecological, geological, physical, ecotoxicological and chemical processes in different ecosystems by means of observations, analysis and experiments in the field and in the lab.

Contents

Different field courses will be organized from which the student can choose two. These field courses will focus on the diversity of different systems and processes respectively from the lacustrine and marine environment. For each system or process an introduction will be given on the environmental, geological and morphological characteristics, including exploration and measurements in the field in order to identify the specific environment. By means of practical exercises including observations, experiments and field sampling (analysis of transects, gradients, time series,..) different aspects of biosphere or geosphere processes in each of the systems will be studied and illustrated.

Initial competences

- Insight in the most important oceanographical and limnological processes. Basis knowledge in ecology, ecotoxicology and geology.

Final competences

1. Be able to determine an optimal sampling strategy and experimental design to investigate a given ecological problem and to carry out research autonomously.
2. Identify fauna and flora based on identification guides.
3. Be able to analyse the data obtained with the appropriate tools (e.g. statistical analysis) and critically discuss and report the results (both written and oral).

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

(Approved)
Conditions for exam contract
   This course unit cannot be taken via an exam contract

Teaching methods
   Integration seminar, work placement

Extra information on the teaching methods
   Lab work and individual data processing

Learning materials and price
   Cost: 300.0 EUR
   field guides

References
   Course material (lecture sides, recent scientific literature) is provided by the lecturers
   (either in printed or electronic form).

Course content-related study coaching
   Guidance in the field and the lab

Evaluation methods
   continuous assessment

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

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

Examination methods in case of permanent evaluation
   Job performance assessment, report

Possibilities of retake in case of permanent evaluation
   examination during the second examination period is possible

Extra information on the examination methods
   Students who eschew the non-periodical evaluation cannot pass for the course.
   For the second examination period, the student will be given a special assignment on
   topics discussed during the field trips.

Calculation of the examination mark
   Evaluation of individual or team report + presentation of the report at the end of the field
   trip; Evaluation of motivation and degree of participation during the field trip.

(Approved)