

## Integrated Field Course at Sea (C003354)

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

**Credits 3.0**

**Study time 90 h**

### Course offerings and teaching methods in academic year 2024-2025

A (semester 2)

English

Gent

work placement

### Lecturers in academic year 2024-2025

Vanaverbeke, Jan

WE11

lecturer-in-charge

Vanreusel, Ann

WE11

co-lecturer

### Offered in the following programmes in 2024-2025

[Master of Science in Marine and Lacustrine Science and Management](#)

**crdts**

3

**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

### Conditions for exam contract

This course unit cannot be taken via an exam contract

**Teaching methods**

Work placement

**Extra information on the teaching methods**

Lab work and individual data processing

**Study material**

None

**References**

Course material (lecture slides, 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

**Assessment moments**

continuous assessment

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

Professional practice, Assignment

**Possibilities of retake in case of permanent assessment**

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.