

Integrated Field Course at Sea (C003354)

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.

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

Credits 3.0 **Study time** 90 h **Contact hrs** 45.0 h

Course offerings and teaching methods in academic year 2022-2023

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

Lecturers in academic year 2022-2023

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

Offered in the following programmes in 2022-2023

| | | |
|---|----------------|-------------------|
| 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

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.