Paleobiology of Micro-organisms (C001584)

Valid as from the academic year 2018-2019

Course Specifications

Lecturers in academic year 2019-2020

- Louwye, Stephen (WE13) lecturer-in-charge
- Vandenbroucke, Thijs (WE13) co-lecturer

Course offerings and teaching methods in academic year 2019-2020

- A (semester 1) English
  - Practicum: 30.0 h
  - Lecture: 20.0 h

Course size

- Credits: 5.0
- Study time: 140 h
- Contact hrs: 50.0 h

Course offerings and teaching methods in academic year 2019-2020

Offered in the following programmes in 2019-2020
- Master of Science in Marine and Lacustrine Science and Management: 6 credits, offering A

Teaching languages

- English

Keywords

- Palaeobiology, fossil micro-organisms, morphology, evolution, palaeoenvironment, palaeogeography, dating

Position of the course

Knowledge and insight of the most important groups of fossil micro-organisms and their evolution since the Precambrian. Their use as proxies for the reconstruction of the palaeoenvironment, palaeogeography and palaeoclimate.

Contents

The palaeobiology of fossil microorganism since the Precambrian: morphology and general characteristics, life strategies, palaeoproductivity, fossilisation and taphonomy, diversity and palaeogeography, evolution, radiation, and extinctions. Fossil micro-organisms as proxies for the palaeo-environment: principles and case studies.

Initial competences

Knowledge of phycology and protistology.

Final competences

1. Advanced knowledge of the discussed fossil microorganisms and their identification criteria.
2. To possess a fundamental insight in their evolution during the Phanerozoic.
3. Apply this knowledge to determine palaeoenvironmental parameters and to reconstruct the palaeogeography and palaeoclimatology.

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, practicum

Learning materials and price

(Approved)
References

Course content-related study coaching
Possibility to ask questions about the oral teaching classes by email, via personal contact and during the practical exercises. Guidance during practical exercises by teachers and assistants.

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, assignment

Examination methods in case of periodic evaluation during the second examination period
Written examination with open questions, assignment

Examination methods in case of permanent evaluation
Assignment

Possibilities of retake in case of permanent evaluation
examination during the second examination period is not possible

Extra information on the examination methods
Written (theory) and report (practical exercises)

Form and contents of the examination are explained at the end of the course. A test evaluates whether students have internalized the final objectives.

Calculation of the examination mark
Work piece 25%, written exam 75%