

Paleobiology of Micro-organisms (C001584)

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

Credits 5.0

Study time 140 h

Course offerings in academic year 2023-2024

Lecturers in academic year 2023-2024

Louwye, Stephen

WE13

lecturer-in-charge

Wong Hearing, Thomas

WE13

co-lecturer

Offered in the following programmes in 2023-2024

crdts

offering

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 over Earth's history. Their use as proxies for the reconstruction of the palaeoenvironment, palaeogeography and palaeoclimate.

Contents

The palaeobiology of fossil microorganisms over Earth's history: 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, Practical

Learning materials and price

Microfossils. H.A. Armstrong & M.D. Brasier, Blackwell Publishing, ISBN 0-632-05279-1. Cost: approx. 40 euro

References

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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.

Assessment moments

end-of-term and continuous assessment

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

Written assessment with open-ended questions, Assignment

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

Written assessment with open-ended questions, Assignment

Examination methods in case of permanent assessment

Assignment

Possibilities of retake in case of permanent assessment

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%