

Paleobiology of Micro-organisms (C001584)

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

Credits 5.0 Study time 140 h Contact hrs 50.0 h

Course offerings and teaching methods in academic year 2019-2020

A (semester 1)	English	practicum	30.0 h
		lecture	20.0 h

Lecturers in academic year 2019-2020

Louwe, Stephen	WE13	lecturer-in-charge
Vandenbroucke, Thijs	WE13	co-lecturer

Offered in the following programmes in 2019-2020

	crdts	offering
Master of Science in Marine and Lacustrine Science and Management	6	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

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

References

Microfossils. H.A. Armstrong & M.D. Brasier, Blackwell Publishing, ISBN 0-632-05279-1

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%