

Course Specifications

From the academic year 2017-2018 up to and including the

Phylogenetics of selected Seed Plant Families and Genera (C003346)

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

Credits 5.0 Study time 145 h Contact hrs 65.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 2)	Dutch	lecture	15.0 h
		excursion	45.0 h

Lecturers in academic year 2018-2019

Chatrou, Lars	WE11	lecturer-in-charge
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Offered in the following programmes in 2018-2019

	crdts	offering
Master of Science in Biology	5	A
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Teaching languages

Dutch

Keywords

Spermatophytes, Phylogeny, Taxonomy, APG III (2009), Basal Angiosperms, Monocots, Eudicots, Morphology, Identification

Position of the course

The introduction to the Biodiversity of Plants in the Bachelor makes it possible to expand this knowledge towards particular groups.

This course has as its subject the Spermatophytes, that group of Land Plants that is now dominant on Earth, both in number of species and in coverage. Thanks to the application of molecular-genetic techniques the natural relationships have become much more clear. We have now reached a highly resolved and strongly supported phylogeny. This has further resulted in a renewed taxonomical classification published as APG III (2009)

The Flowering Plants are now divided into three groups: Basal Angiosperms, Monocots, and Eudicots. Within each of these groups the more important or interesting orders and families will be treated, with a focus on their morphology.

The extensive practical training will lead towards a profound knowledge of the morphology of families, genera and species. With this knowledge the student will be able to perform identifications, on each of the mentioned taxonomical levels.

Contents

Hoorcolleges en excursies:

- Basale Angiospermen (Amborellales, Nymphaeales, Austrobaileyales, Magnoliiden)
- Monocotylen (Basale Monocotylen, Liliiden, Commeliniden)
- Basale Eudicotylen
- Rosiden (Basale Rosiden, Fabiden, Malviden)
- Caryophylliden
- Asteriden (Basale Asteriden, Lamiiden, Campanuliden)

Initial competences

Basic knowledge of land plant morphology
Basic knowledge of phylogeny and taxonomy
Basic knowledge of botanical terminology

Final competences

- 1 Knowledge of the major groups of seed plants and their relationships.
- 2 Knowledge of some important orders and families of Angiosperms, and ability to characterise them based on morphological characters.
- 3 Observing morphological structures in seed plants.

4 Skills in identification of Spermatophytes.

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

Excursion, lecture

Extra information on the teaching methods

Hoorcolleges

Excursies: rondleidingen in de Plantentuin, samenwerken, met veel discussie en overleg, eigen les met praktijkoefening.

Learning materials and price

The complete syllabus is available on Minerva.

References

Will be shown and commented during the course

Course content-related study coaching

Permanent presence of teacher and collaborators

Evaluation methods

end-of-term evaluation and continuous assessment

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

Oral examination, report

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

Oral examination, report

Examination methods in case of permanent evaluation

Participation

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Calculation of the examination mark

Non-periodic evaluation: 20%

Periodic evaluation: 80%