

Biodiversity of Plants s.L. (sensu Linnaeo) (C003481)

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 5.0 Study time 138 h Contact hrs 68.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 1)	Dutch	Gent	teaching method	hours
			online lecture	0.0 h
			practicum	36.25 h
			lecture	20.0 h
			seminar: coached exercises	12.5 h
			online seminar: coached exercises	0.0 h

Lecturers in academic year 2020-2021

Verbeken, Annemieke	WE11	lecturer-in-charge
Beeckman, Tom	WE09	co-lecturer

Offered in the following programmes in 2020-2021

programme	crdts	offering
Bachelor of Arts in Philosophy	5	A
Bachelor of Science in Biochemistry and Biotechnology	5	A

Teaching languages

Dutch

Keywords

Biodiversity of plants, prokaryotes, protists, algae, land plants, fungi, introduction to morphological and anatomical diversity in flowering plants

Position of the course

The student will receive a concise survey of the biodiversity of the mentioned groups, with more attention to some particular & important taxa in these groups. The extended practical exercises and guided tours in the botanical garden will allow to show many taxa as real objects and to work hands-on with these plants

Contents

Prokaryotes : Eubacteria, Metabacteria (= Archaea), Cyanobacteria
 Protists : ciliates, flagellates, unicellular algae, myxomycetes
 Macroalgae : red algae, brown algae, green algae
 Landplants : mosses, ferns & fern allies, seed plants, gymnosperms & angiosperms
 Morphology & anatomy of flowering plants : introduction
 Fungi : primitive fungi, zygo-, asco- & basidiomycetes, deuteromycetes, lichens

Initial competences

No specific knowledge is needed. Basic knowledge of botany is of course a good start.

Final competences

- 1 The student has good knowledge of life processes and life cycles of plants in a very broad sense. The student has good knowledge of the systematic position of model organisms.
- 2 The student has knowledge of the necessary botanical terminology to communicate about organisms on a scientific level.
- 3 The student is aware of the importance of model systems and model organisms within Biochemistry and Biotechnology, can situate these in the Tree of Life, and has the necessary evolutionary insights.
- 4 The student has insights in the way flowering plants (and by extension other

landplants) are built, and this at all different levels: cell (cytology), tissues (histology), organs (anatomy) and morphology.

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, seminar: coached exercises, online lecture, online seminar: coached exercises

Extra information on the teaching methods

Exercises: practical classes with multimedia-demo, guided tours in the botanical garden

Learning materials and price

Syllabus and notes for the practical courses are available, as well as ppt-presentations. The botanical garden is open to the public daily and for free, and is situated next to the teaching building

Practical courses: fresh material and microscopical slides.

Price: about 30 euro.

References

Course content-related study coaching

Practical courses, and on-line available : list of terminology, list with important parts of the course, examples of examinations.

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, oral examination

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

Written examination with open questions, oral examination

Examination methods in case of permanent evaluation

Written examination

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

Non-periodic evaluation: practical exam at the end of the practical series, all practica are compulsory and the evaluation of the practica counts for 3/20 of the practical exam. Only those who participated in all practica can take the practical exam. This also applies to the practical exam in the second session.

Periodic evaluation: exam theory, written with open questions, afterwards the same questions are discussed orally, this with each of the teachers.

Exam structure and contents are discussed at the end of the courses in a separate session with both teachers and assistants.

Calculation of the examination mark

theoretical exam: 3/5 for the part of prof. Verbeken, 1/5 for the part of prof. Beeckman; practical exam: 1/5

The student has to pass for the three separate parts (theoretical part Verbeken, theoretical part Beeckman, practical exam) in order to pass for the complete exam.