



BIOL2141 Systematics A) Principles and methods B) Plant biodiversity

[22.5h+22.5h exercises] 3 credits

This course is taught in the 2nd semester

**Teacher(s):** Michel Baguette, Thierry Hance (coord.), Anne-Laure Jacquemart, Eric Le Boulengé, Renate

Wesselingh

Language: French
Level: Second cycle

## Aims

To make accessible the principals and methods on which lay the classifications of all living species. To precise the notion of specie and its limits, its identification and nomenclature. To study the diversity of polants and especially Angiosperms.

## Main themes

The course will contain the following points: 1) the classifications: goals, necessities and applications; the big schools and actual debate; 2) the specie: concept and limits (from the race to the specie groups); principals of nomenclature and of description; speciation and evolution; 3) Phylogenesis: principals of reconstruction, data analysis, using molecular biology, critics of representations; 4) The diversity of plants: historical, Pteridophytes and Gymnosperms, the actual classification system of Angiosperms and the diversity of families.

## Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisites: basic courses in general biology, genetics and ecology, including integrated practical works.

Evaluation: oral examination with documents to analyse.

Support: reference books or notes written by the teachers, review articles.

Practical works:equipment and infrastructure of laboratories, plant and animal materials.

## Other credits in programs

BIOL21/B Première licence en sciences biologiques (Biologie des

Mandatory

organismes et des populations)