



## BIOL2142 Mycetes morphology and physiology

[15h+15h exercises] 2 credits

This course is taught in the 1st semester

**Teacher(s):** Anne-Marie Corbisier  
**Language:** French  
**Level:** Second cycle

### Aims

To give the elements of Mycetes biology, on the aspects of morphology, physiology and classification.

### Main themes

1. Introduction (reminders) (1h) : Situation of mycetes in the living world - affinity and presumed origin of the main groups of mycetes.
2. Morphology (4h) : a) Ultrastructure: particularities of the nucleus, of the mitosis, of the meiosis, of ribosomes. The mitochondries. Centriols, centrosomes, cinetosomes and flagells. The cell walls and its composition. b) Vegetative structures: hyphes and their growth, filamentous thallusesXX and unicellular thalluses, massive differentiated thalluses and their associated structures. c) Multiplication and reproduction structures: budding ; conidiesXX and conidiophoresXX, pycnides; sporocystsXX and spores; ascomata and ontogenesis of asques and apical systems; basidiocarps.
3. Physiology (4h) : a) cellular components : proteins and polysaccharids of mycetes b) metabolic processes and their products c) secondary metabolism and their products.
4. Lichen symbiosis (4h) : a) the different aspects of algue-mycete symbiosis b) lichen structure c) physiological characteristics of lichen thallus and metabolits movements between partners d) the nature of lichenic symbiosis, its origine and its evolution.
5. The mycetes and the Human (applied mycology) (1h) : The mycetes and the food industry.
6. Classification (1h) : The big groups and their structural and fonctionnal particularities.

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

Prerequisites: general biology.

Support: syllabus or reference book.

### Other credits in programs

**BIOL21/B** Première licence en sciences biologiques (Biologie des organismes et des populations)

Mandatory