



## BIOL2201 Biological evolution

[30h] 2 credits

This course is taught in the 1st semester

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

### Aims

To give a main view of the steps that lead to the appearance of life on earth and its evolution to the human species ; to present and discuss the different hypotheses proposed to explain these steps, to develop the critical sense of students.

### Main themes

- Historical view : ancient theories and recent interpretations.
- Evolution of organic molecules from the mineral material and the appearance of characteristics of life.
- Evolution of prokaryotes, relations between them and eukaryotes.
- Molecular evolution and use of molecules to establish the evolutionary relations.
- Evolution of plants and animals : differences and similarities ; installation of life on firm ground ; influence of biotic factors and coevolution.
- Mechanisms responsible for speciation and evolution : polymorphism, natural selection, isolation.
- Origin of man and cultural evolution.

The molecular, genetic, cytological and morphological aspects looked upon in most chapters. The origin of life, of eukaryotes, the evolution of plants and animals necessary to know the ancestors of modern man. Also we look upon ecology and biogeography in the chapters concerning evolution and coevolution of organisms.

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

Prerequisites: biochemistry, cellular biology, zoology and botany.  
 Supports: syllabus, slides, films.

### Other credits in programs

<b>BIOL22/A</b>	Deuxième licence en sciences biologiques (Biologie moléculaire, cellulaire et humaine)	(2 credits)	Mandatory
<b>BIOL22/B</b>	Deuxième licence en sciences biologiques (Biologie des organismes et des populations)	(2 credits)	Mandatory
<b>ISP22</b>	Deuxième licence en philosophie	(2 credits)	