BIOL2133 Animal embryology

[30h+15h exercises] 3.5 credits

This course is taught in the 2nd semester

Teacher(s):	René Rezsohazy
Language:	French
Level:	Second cycle

Aims

Teaching has three main objectives. The first is to allow to understand the individual's unity by the description of the continuity of his existence's phases. The second is to emphasis on the specie's unity with the comprehension of the processes involved in the continuity between generations. The third is to highlight the unity of the animal reign by the description of the homologies in the development phases of the embryoXX belonging to the main embranchements.
CONCERNS: mandatory for BIOL21a students.

Main themes

Teaching starts with the comparaison of sexual and asexual reproduction caracteristics. The common steps in the embryo development of all species are analysed: meiosis, gametogenesis, fecundation, segmentation, gastrulation and organogenesis. The first stages of the development of a specie belonging to the main embranchements is described. Finally, the human development is taking as example for organogenesis.

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

Prerequisites: animal biology, histology, basics on structure of the main organs of mammals, reproductive physiology of mammals.
Assisted work: examination of embryos on histological preparations. Examination and manipulation of alive embryos from several species.
Support: reference book or syllabus, slides.

Other credits in programs

BIOL21/A	Première licence en sciences biologiques (Biologie moléculaire, cellulaire et humaine)		Mandatory
BIOL22/B	Deuxième licence en sciences biologiques (Biologie des organismes et des populations)	(3.5 credits)	