

2.00 credits

22.5 h

Q2

Teacher(s)	Gilissen Emmanuel ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	<p>Designed for biology as well as archeology students, this course will offer the fundamentals of vertebrate evolution in a broad comparative context. The major chapters of this evolution will be studied in the context of earth history with reference to continental drift and climatic change, as illustrated by the stratigraphic and paleo environmental records. After a review of the available fossil material, we will analyze fossil data illustrating the origin of the first vertebrates and the origin of the subsequent groups to underline their specific adaptations and their phylogenetic relationships, mainly with reference to comparative anatomy but also to genomics. The vertebrate history shows numerous examples of evolutionary convergences that will be illustrated here. In this framework, the special case of the human lineage, the climate context of the Quaternary, the fundamentals of archeozoology will be covered. The course is a lecture and, depending on the students' main interests, some topic will be covered more in depth. For instance, topics such as the origin of the first tetrapods, the origin and the evolution of sensory adaptations in vertebrates, birds origin, the relationships between Neanderthals and anatomically modern humans and the emergence of domestication will be proposed to the students. This course can be taken as a follow up of the first part of LBIO1231C « Biologie animale - biologie comparée des vertébrés » which is not a compulsory prerequisite. Students without the LBIO1231C background will receive all the necessary information during the LGEOL 2401 lessons.</p>
Learning outcomes	
Evaluation methods	Oral exam with preparation
Inline resources	<p>A syllabus including the illustrations of the anatomical structures will be given to the students. A choice of essential references will be proposed for each theme.</p> <p>All on moodle</p>
Faculty or entity in charge	GEOG

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biology of Organisms and Ecology	BOE2M	2		