UCLouvain

## Igeol2401

2019

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

| 2 credits | 22.5 h | Q2 |
|-----------|--------|----|
|           |        |    |

| Teacher(s)                  | Gilissen Emmanuel ;  |  |  |  |
|-----------------------------|--|--|--|--|
| Language :                  | French   |  |  |  |
| Place of the course         | Louvain-la-Neuve   |  |  |  |
| Main themes                 | 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 whitout the LBIO1231C background will receive all the necessary information during the LGEOL 2401 lessons. |  |  |  |
| Aims                        | The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".  |  |  |  |
| Evaluation methods          | Due to the COVID-19 crisis, the information in this section is particularly likely to change.  Oral exam with preparation  |  |  |  |
| Inline resources            | 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.  All on moodle  |  |  |  |
| Faculty or entity in charge | GEOG   |  |  |  |

| Programmes containing this learning unit (UE)            |         |         |              |      |  |  |
|--|---------|---------|--------------|------|--|--|
| Program title  | Acronym | Credits | Prerequisite | Aims |  |  |
| Master [120] in History of Art and Archaeology : General | ARKE2M  | 2       |              | ٩    |  |  |
| Master [120] in Biology of<br>Organisms and Ecology      | BOE2M   | 2       |              | ٩    |  |  |